

Exploring the Relationship between Neighbourhood Environment and Mental Health in Toronto

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Foreword

My area of concentration looks at the environmental injustice taking place in Canada and the United States. I focused on the impact that hazardous solid and liquid waste had on the environment and the mental health of the poor, working class, and minorities. I also examined the environmentally discriminatory events and actions that are taking place in Canada and the impact they have, domestically and internationally.

The components of my Plan of Study (PoS)- (a) Hazardous Waste and its Management Practices, (b) Health Effects Resulting from Hazardous Waste and (c) Poor Hazardous Waste Policy and Legislation form an interlocking triad that assisted with the concept and framework for my primary research paper. As mentioned in my PoS, two of my learning objectives explore the mental health impacts that result from living in neighbourhoods closer to industrial facilities and examine the correlation between race, economics, neighbourhood environment and psychological well-being.

My research is located at the intersection of my three components. Through this process, I learned more about the connection between neighbourhood environment and mental health. I also learned what people in Toronto think about their own neighbourhoods, environments and mental health. I explored perceptions of what can be done to improve mental health outcomes. I successfully conducted my independent major research paper. This major paper helped me achieve learning objectives 2.3 and 3.3. I believe that I have successfully met all the objectives I laid out for myself in my POS and met the requirements for my Master of Environmental Studies (MES) degree.

Acknowledgement

I want to thank my MES I-II advisor Professor Peter Victor for providing me with excellent guidance when I was constructing my Plan of Study (PoS). His direction helped me to produce a strong PoS and focus my research interests.

I also want to give a big thanks to my wonderful supervisor, Professor Sarah Flicker for being patient, supportive and an excellent guide for me through this MES major paper. It was an honour to have gotten the chance to work with you and learn from you. I truly appreciate all the advice and knowledge that you have passed on to me through this MES degree.

I want to appreciate the residents of Alexandra Park and Hogg's Hollow for their time and allowing me to interview them and educate me about their neighbourhood.

To all my awesome friends (Farzana, Kathy, Jessica, Tahsin and Sabikun): I am grateful for all your kindness, support and guidance during my difficult times while pursuing my master's degree. I could not have done it without your help, and I dedicate this paper to you and all the people out there fighting to create a better environmental and mental well-being.

To my incredible parents thank you for all your unconditional love and support and for always pushing me to work hard and be better, so that I can get out of my comfort zone and challenge my boundaries.

Abstract

This paper explores perceptions of the relationship between neighbourhood environment and mental health in Toronto. I hypothesize there is a link between neighbourhoods characteristics and mental health that is mediated by daily stress and vulnerability to negative events. At the beginning of my paper, I situated the current studies in the academic literature and analyzed what other authors have found about the correlation between neighbourhood environment and its impact on mental health.

I conducted a qualitative study and carried out my research in two locations: Alexandra Park and Hogg's Hollow. A total of ten people were interviewed for approximate 27- 60 minutes, either face-to-face or over the telephone. Every participant answered the same series of semi-structured questions about their neighbourhood environment and the potential impact it can have on their mental health. My interviewees provided me with a variety of responses; some believed there is a definite relationship between neighbourhood, environment and mental health, while others said they do not see a connection. One interviewee was indecisive. All my participants, however, seemed to agree that there is a positive link between social interaction, green space and mental health, and a negative relationship between crime, violence, noise and psychological well-being.

My research findings illustrate that a person's mental health can be impacted by economic and social factors such as income level, education, language, crime, noise and community ties. These factors usually define our neighbourhoods. My research provides evidence that the neighbourhood we live in can influence our psychological well-being. Therefore, some neighbourhood buffers such as green space, social ties and physical activities can have a positive impact on resident's mental health. I conclude that data from my research work had strong evidence to support the hypothesis and would like to point out that we need to raise awareness about inequity in the city and suggest for further research to be done.

Keywords: Neighbourhood Environment, Mental Health, Green Space, Social Connection, Neighbourhood, Depression, Stress, Activities, Crime, Housing, Affluent, Low-income

CHAPTER ONE: INTRODUCTION

What is a neighbourhood?

A neighbourhood is more than a physical territory. It is composed of a complex environment of "homes and other buildings, local resources like schools, shops, places of worship, green space, and streets" (Hospital, 2018, p. 1). A neighbourhood is where several thousand residents cover an area and that can be walked across. It is a spatial unit, where face-to-face social interactions take place among residents. This personal setting often facilitates the sharing of common values, social space and can influence social control (Freiler, 2004). Neighbourhood residents play a significant part in the community they live in, they influence each other's behaviours, social interactions, travel and traffic patterns and their feelings about the place where they live (Hospital, 2018). The characteristics and interactions of the buildings, people, and the attitudes found in a neighbourhood determine the neighbourhood itself (Hospital, 2018). Often, we hear people describe their neighbourhood in terms such as "working-class", "gentrified", "run-down", "affluent", "leafy", "good", "bad", or "dangerous."

According to Freiler (2004), there is no single definition of a neighbourhood, it is fluid and can be different at different times depending on the situation, the people and the policy. Power and Wilson suggest that "a neighbourhood is like an onion" and further elaborate that "neighbourhoods often have sharp boundaries, either physical or atmospheric, but the layers of neighbourhood life are like an onion with a tight core and a loose outer skin" (Power and Wilson, 2000).

The inner core may be described as a home area. The home area includes home and the immediate surroundings which are used by individuals for social interaction and making connections with others (Freiler, 2004). According to Lupton social communication demonstrates and reflects one's value in the society (Lupton, 2003). The next layer is the locality. The locality includes schools, shops, parks, hospitals, public transportation (Power and Wilson, 2000). The neighbourhood environment defines its "reputation," its "physical appearance" and "feel." It also encompasses social norms that impact who we are and how we should behave and offers a sense of security to residents (Power & Wilson, 2000). Lupton

describes the wider urban district or region as the level of the neighbourhood that exists for job opportunities, "the wider landscape of social and economic opportunities" (Lupton, 2003). Each of these layers contribute(s) in a myriad of ways to the social determinants of health and well-being.

What is mental health?

Mental health is defined as the psychological well-being of a person, and this includes positive mental states like happiness, being satisfied with life, and being stress-free (Hospital S. M., 2018). Mental health also involves poor psychological conditions such as being highly stressed, feeling anxious, unhappy or bored (Hospital S. M., 2018). It can also include mental illness like major depression. Currently, mental health problems are an important public health concern due to the high burden on individuals and societies caused by the economic cost and the constant increase in the gap between the need for treatment and its provision (Barton & Rogerson, 2017). According to Mental Health Commission of Canada (MHCC) the total cost from mental health problems and illness to the Canadian economy is at least \$50 billion per year which represents 2.8 percent of Canada's 2011 gross domestic product (Canada M. H., 2016). MHCC predicts that over the next 30 years the total cost to the economy will add up to more than 2.5 trillion (Canada M. H., 2016).

What is mental illness?

According to the Canadian Mental Health Association, "Mental illness is a collection of disorders such as depression, bipolar disorder and anxiety" (Understanding Mental Illness, 2018). One in every five Canadians will have a mental health problem at some point in their lives (Understanding Mental Illness, 2018). "More than 6.7 million people in Canada are living with a mental health problem or illness today" (Canada M. H., 2016, p. 1). "Mental health problems and illnesses can hit early in people's lives" (Canada M. H., 2016, p. 1). Data shows more than 28 percent of people aged 20-29 experience a mental illness in a given year and by the time people reach 40 years of age, 1 in 2 people in Canada will have had or have a mental illness (Canada M. H., 2016). Mental illness can affect people of any gender, age and ethnic-culture and socio-economic group (Understanding Mental Illness, 2018). Some common symptoms associated with mental illness are the loss of motivation and energy, change in sleep pattern, extreme mood

swings, disturbances in thought or perception, or overwhelming obsessions or fears (Understanding Mental Illness, 2018).

What causes mental illness?

Health professionals and researchers believe that mental illness results from an interaction of biological, physical, environmental, and social factors. The amount of stress and the duration of that stress can interfere with relationships and a person's ability to function on a day to day basis resulting in social isolation. Therefore, where we live and whether we have a strong support system such as close family and friends whom we can rely on, can impact our feelings of comfort, safety and well-being.

What is the difference between mental health and mental illness?

People commonly use the terms "mental health" and "mental illness" as if they were the same things, but they are not. "Everyone has mental health like health" (Canadian Mental Health Association, 2018). As the Centre for Addiction and Mental Health (CAMH), a well-known mental health institution in Toronto famously campaigns "Mental health is health." Over the course of a lifetime, not everyone will experience mental illness, but everyone will struggle or have challenges with their mental well-being, just like the challenges we face with our physical well-being from time to time (Pilgrim, Rogers, & Pescosolido, 2011). Mental health is our mental well-being, "our emotions, our thoughts and feelings, our ability to solve problems and overcome difficulties, our social connections, and our understanding of the world around us" (Canadian Mental Health Association, 2018). Good mental health is about living and coping well despite problems (Pilgrim, Rogers, & Pescosolido, 2011).

"Mental illness is an illness that affects the way people think, feel, behave, or interact with others" (Canadian Mental Health Association, 2018). There are different types of mental illness, and they have different symptoms that impact peoples' lives in different ways. There are different degrees of health, and people can move on a "continuum ranging from great or good health to so-so health to poor health to illness or disability" (Canadian Mental Health Association, 2018). It is possible to have poor mental health but no mental illness, and also to have good mental health even with a diagnosis of a mental illness because mental illnesses are often episodic, "there are

times ('episodes') of ill health and times of better or good health" (Canadian Mental Health Association, 2018).

When is a neighbourhood mental health risk?

"When a stressor in a person's environment overwhelms his or her personal and social resources depression or anxiety can result" (Hospital S. M., 2018, p. 1). For example, an individual living in a dangerous neighbourhood with a high level of crime, violence and mistrust may prefer to stay inside their home and limit their social communication to only close friends and family. This kind of situation can isolate a person from their social resources like informal social support from neighbours or psychosocial resources like a women's group. The feeling of isolation, resentment and powerless can break down personal resources like self-esteem or the sense of optimism and control over one's own life (Hospital S. M., 2018).

The purpose of the research study

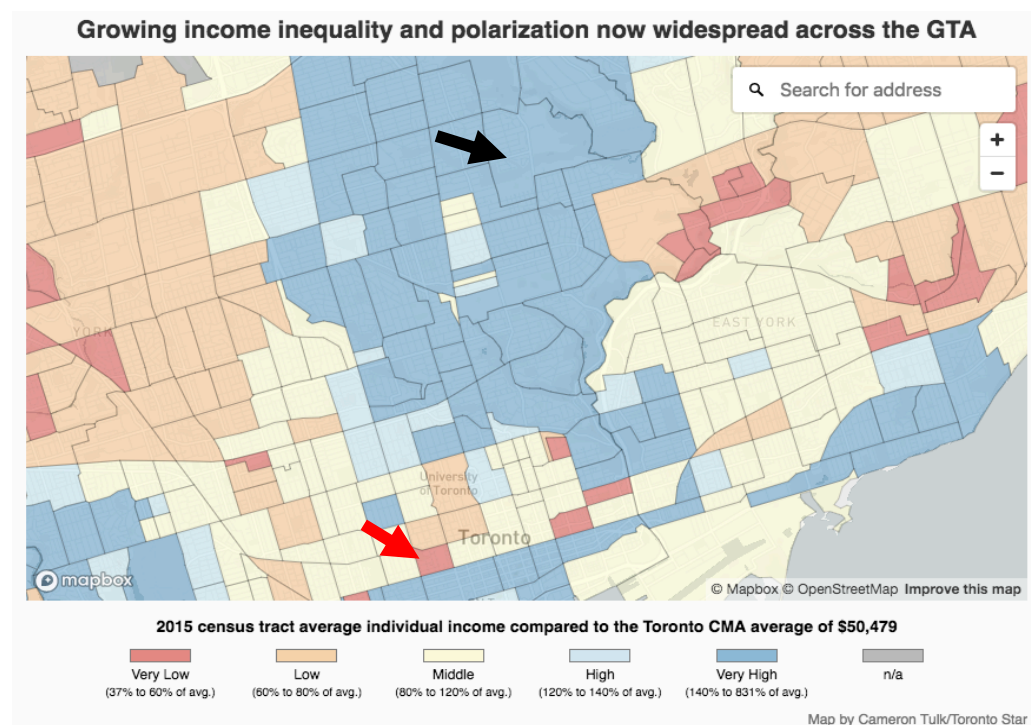


Figure 1: Growing income inequality and polarization across the Greater Toronto Area (Monsebraaten, 2017). The red arrow indicates Alexandra Park and the black arrow shows Hogg's Hollow.

Hulchanski (2007) describes that wealth and poverty have divided the city of Toronto's neighbourhoods. The gap between rich and poor continues to increase due to great income disparity, and this can accelerate decline and deepen economic isolation in areas already struggling (Hulchanski, 2007). My research paper will focus on the relationship between neighbourhood environment and mental health in Toronto. My research will investigate how residents in two of Toronto's neighbourhoods perceive the relationship between their neighbourhoods environment and mental health. For my study, I have selected a poor/working-class neighbourhood, Alexandra Park with an average household income of \$29,532 and an affluent neighbourhood, Hogg Hollow, average income of \$331,626. My intention was to collect a diversity of data that can support my hypothesis (Monsebraaten, 2017).

I hypothesize there is a correlation between neighbourhoods characteristics and mental health that is mediated by daily stress and vulnerability to negative events as displayed in Figure 4 below. In other words, positive neighbourhood characteristics will promote positive mental health and negative neighborhood characteristics will stimulate negative psychological well-being. I recruited ten participants for my research study, five from each neighbourhood and asked them to share their insights and experiences about mental health and their neighborhood. I examined these ten participants' stories through exploring factors such as disadvantaged neighbourhoods (e.g. high rates of poverty), neighbourhood green areas (e.g. parks and playground), social disorder (e.g. crime), high level of social capital (e.g. social participation), housing cost, quality, and security and a child's neighbourhood (e.g. school and extracurricular activities). My research will contribute to the existing literature on neighbourhood environment and psychological well-being in Toronto. I hope to use my findings to advocate for improving mental health through neighbourhood-level interventions and programs.

CHAPTER TWO: LITERATURE REVIEW

What is the connection between neighbourhoods and mental health?

Neighbourhood Characteristics

Neighbourhoods with negative features such as with poor-quality housing, few resources and unsafe conditions can result in stress which can lead to depression (Cutrona, Wallace, & Wesner, 2006). Neighbourhood conditions do not affect everyone the same way and people with various personalities, resources and resiliencies cope and adjust with challenging neighbourhood conditions differently. Recent research reveals that "depression may be linked to characteristics of the neighbourhoods in which people live" (Cutrona, Wallace, & Wesner, 2006). Scholars such as Cutrona, Wallace and Wesner argue that it is important to understand the role of neighbourhoods in the development of depression for at least three reasons: (1) people do not recognize that they are being affected by their surroundings and blames themselves for these invisible stressors that are affecting their psychological well-being; (2) outsiders don't realize that residents in a disadvantageous neighbourhood are more affected by their surroundings than their characteristics or race; (3) when there are threats to public health by the characteristics of entire communities, it should be addressed "at the community level rather than to treat each affected individual separately" (Cutrona, Wallace, & Wesner, 2006). Cutrona and colleagues (2006) claim that stress plays a central role in theories that link neighbourhood characteristics and depression. They discussed that neighbourhood characteristics could influence the stress process in three different ways: (1) characteristics of a neighbourhood can influence the level of daily stress imposed upon residents; (2) neighbourhood characteristics influence people's vulnerability to depression following negative events in their lives; (3) neighbourhood characteristics can hinder the formation of bonds among people which can lead to depression through several pathways such as "lower level of informal social control, inadequate social support, and poor family-role performance" (Cutrona, Wallace, & Wesner, 2006, p. 2). According to Cutrona and colleagues (2006), neighbourhood stressors may be imposed by physical characteristics of the neighbourhood (like lack of resources and unpleasant physical surroundings) or by the people who inhabit the neighbourhood (example: threats to physical safety) (Cutrona, Wallace, & Wesner, 2006). Negative neighbourhood features like low-quality housing, high traffic density, and undesirable commercial operations like adult bookstores, can

create stress in the lives of residents living in that area. Low-income neighbourhoods often lack access to needed resources such as health care, retail stores, and recreational facilities. This is demoralizing because of the extra effort required to meet daily needs and this can result in stress and depression.

Crime and Neighbourhood Disorder

People in disadvantaged neighbourhoods face the fear of being victimized, which is also a potent source of stress. Ross (2000) argues that residents living in poor-quality neighbourhoods are regularly reminded of their unsafe condition through visual cues such as crime, vandalism, graffiti, noise, drug use, litter and bad relationships with neighbors. These people must learn to cope with their anxiety over their personal safety and the insecurity of their possessions. This kind of situation imposes stress and can lead to depression.

Additionally, neighbourhood-level problems such as industrial activities in the community can also be perceived as a neighbourhood disorder by the residents, which can induce stress and depression if residents find it threatening to their health and their families. Therefore, Cutrona, Wallace and Wesner recommend that "research should be conducted on the most effective ways to mobilize neighbourhood residents to meet common goals and improve the context in which they live" (Cutrona, Wallace, & Wesner, 2006, p. 1).

Authors Curry, Latkin, and Davey-Rothwell (2008) also stated that crime and neighbourhood disorder might negatively impact the health of urban residents. Residents living in a neighbourhood with a high level of violent crime may have an increased risk of experiencing violence (Curry, Latkin, & Davey-Rothwell, 2008). These authors point out that most studies support the assertion that neighbourhood disorder impacts mental health. Scholars have used residents' rating of their neighbourhood and analyzed how factors such as exposure to violent crime and vacant housing contributes to mental health. Neighbourhood conditions in most of the studies are usually viewed as the chronic stressor, producing psychological distress, but it is unclear how these chronic stressors operate to produce psychological distress. It also does not answer if "these conditions impact individual perceptions of the environment, leading to the feeling of fear, anxiety, or hopelessness? Do violent neighbourhoods impact psychological

distress by increasing individual's exposure to actual violence?"(Curry, Latkin, & Davey-Rothwell, 2008, p.2).

Curry, Latkin and Davey-Rothwell's study recruited samples from Baltimore, Maryland to examine the relationships between block-group level crime, perceived neighbourhood disorder, violence experienced in the neighbourhood, and depression to test the hypothesis that "neighbourhood violent crime has a direct impact on experiences of violence" (Curry, Latkin, & Davey-Rothwell, 2008, p.1). They hypothesized that there would be a direct and indirect impact of neighbourhood violence on depressive symptoms (Curry, Latkin, & Davey-Rothwell, 2008). Their study findings support "a model in which violence is associated with psychological distress through the perception of neighbourhood disorder and experience of violence" (Curry, Latkin, & Davey-Rothwell, 2008, p.1). However, Curry and colleagues discussed that their sample represented a homogenous group of individuals with a low socioeconomic background living in a neighbourhood with high levels of drug activity. They expressed that if the sample group had included a wider range of affluent neighbourhoods and participants, their results would have been strengthened "due to the increase in variation of both predictors and outcomes" (Curry, Latkin, & Davey-Rothwell, 2008, p. 8). They believed that "in more affluent neighbourhoods, with little crime or disorder, there may be no observable impact of violent crime on mental health status. Furthermore, higher levels of available social support and social resources in more affluent neighbourhoods may have a greater impact on mental health status" (Curry, Latkin, & Davey-Rothwell, 2008, p. 8). The authors concluded that it takes community and structural level interventions to decrease neighbourhood crime and improve residents' opinion of their neighbourhood (Curry, Latkin, & Davey-Rothwell, 2008).

Neighbourhood and Parenting

Caspi, Taylor, Terrie and Plomin (2000) bring in a new perspective to the link between neighbourhood features and mental health. They claim that children living in an unsafe and disordered neighbourhood with adverse environmental characteristics tend to have more negative psychological well-being and lower educational results than children living in a good-quality neighbourhood with high-income parents (Caspi, Taylor, Terrie E., & Plomin, 2000). Galster (2014) states that there is a "clear link between neighbourhood and child outcomes, comes

through the effects on parenting" (Galster, 2014, p. 2). Most parents worry about the well-being of their children and want to safeguard them. When parents raise children in an unsafe community with limited access to a playground, parks with trees, open green space and walkable environment, they feel frustrated and depressed for not being able to provide a safe and playful environment for their kids. This kind of situations increases stress levels for both parents and children and can be detrimental to their mental health (MacDonnell, Robinson, Mikadze, McDonough, & Meisner, 2011). United Way's report called child poverty in Toronto into question due to the growing income disparity among parents. It indicates that children from a low-income family (annual income below \$30,000) don't participate in arts or sports programs after school hours due to their financial barriers affecting their confidence and self-esteem level (MacDonnell, Robinson, Mikadze, McDonough, & Meisner, 2011). Additionally, some parents also believe that industrial activities in the neighbourhood will degrade the natural beauty of their community and prevent the establishment of green spaces; all this could also be a factor for psychological distress (Caspi, Taylor, Terrie E., & Plomin, 2000).

Luthar and Latendresse (2005) discussed that stereotypically it is assumed that children of upper-class neighborhood and highly educated parents are at "low risk" when it comes to their psychological well-being and youth from the impoverished background are at "high risk" due to their poor upbringing and disadvantageous neighbourhood environment. The authors argued that family wealth does not automatically make someone experienced in parenting. They point out that studies have shown that upper-class children are also struggling with several difficulties such as substance use, anxiety, drugs, smoking and depression (Luthar & Latendresse, 2005).

Luthar and Latendresse noticed that children with very high perfectionist striving characteristics and "parents overemphasizing their accomplishments, valuing them disproportionately more than their personal character" tend to consider achievement failures as personal failures and experience high depression, anxiety and substance use (Luthar & Latendresse, 2005, p. 2). Additionally, upper-middle-class parents often leave their kids home alone for several hours each week believing this will "promote self-sufficiency" (Luthar & Latendresse, 2005, p. 2). Suburban children with high profile career-oriented parents often suffer from a lack of emotional closeness because their parent's demanding professions do not allow for much "family time" and

youngsters are usually busy balancing various after-school activities (Luthar & Latendresse, 2005, p. 3). Luthar and Latendresse (2005) revealed through their study that wealthy children are experiencing literal and emotional isolation and often suffer from distress and substance use as well (Luthar & Latendresse, 2005). They concluded that affluent American parents believe that an Ivy League education and subsequent lucrative career are critical for their children's long-term happiness. But in the pursuit of all these ambitious goals, they forget the possible cost associated with it on their children's mental health and well-being (Luthar & Latendresse, 2005).

Poor Neighbourhoods Impact Life Outcomes

Scholars Manley and Ham (2012) point out that many academics and policymakers believe that living in a poor, negative neighbourhood can severely affect health outcomes, educational achievement and labour market performance (Manley & Ham, 2012). The adverse neighbourhoods are associated with "lack of positive role models, negative socialization, a physical disconnection from job-finding networks, a culture of dysfunctional values and disconnection from mainstream society, discrimination by institutions and employers from outside the neighbourhood, access to low-quality public services, and exposure to high levels of criminal behaviour" (Manley & Ham, 2012, p. 147). Therefore, the authors test the hypothesis "that living in a neighbourhood with a high level of unemployment has a negative effect on individual labour market outcomes" in their book *Neighbourhood Effects Research: New Perspectives*, 2012, page 149. The authors describe how mortgage providers play an important indirect role in neighbourhood selection by homeowners. Loan application results play a large role in deciding where one can afford a house. While processing loan applications, mortgage providers look at the individual and household income, job security and potential career development. People with the least secure jobs get the lowest mortgages and therefore select homes in the cheapest neighbourhoods, often with a high unemployment rate (Manley & Ham, 2012). Therefore, the "labour market is also driving the selection of neighbourhoods by households in the owner-occupied sector" (Manley & Ham, 2012, p. 170). The authors conclude that the "correlations between neighbourhood unemployment levels and individual unemployment are at least in part, the result of selection bias" because an individual's educational achievement will point out the significance it has on one's employment

opportunities. This will allow real outcomes and tangible changes in someone's life course (Manley & Ham, 2012, p. 12).

Ludwig and colleagues conducted a study by creating a housing program called the "Moving to Opportunity." It was designed to help poor families relocate to a better neighbourhood with the assumption that it may show improvement in their health and happiness. This study was limited to families with children who were living in high poverty areas in Baltimore, Boston, Chicago, Los Angeles and, New York. Most of these families were headed by a black or Hispanic female, and fewer than 40 percent had completed high school (Ludwig, et al., 2014). They used this program as a way to get away from drugs and gangs. The research findings did show there is an improvement in physical and mental health after participants moved to a less poverty stricken neighbourhood because there was a strong decline in obesity and diabetes among women and the head of the household also appeared to be happier (Ludwig, et al., 2014). Ludwig and colleagues speculated that this change could be due to moving to a better neighbourhood with better health care access or greater access to healthier foods and exercise could "conceivably improve health" (Ludwig, et al., 2014, p. 2). Another plausible explanation could be most of the participants wanted to move to a secure environment away from gangs and drugs hence, moving to a safer neighbourhood may have reduced chronic stress (Ludwig, et al., 2014). But the researchers found no significant long-term effect on earnings or work probably because the "Moving to Opportunity" program was not moving families to places where jobs were more available. Ludwig and colleagues discussed that these families might need more support such as high-quality education, training, and employment services programs to assist them with finding jobs and advancing up the career ladder. They also noticed there was a minimal effect on children's overall school performances. However, the program did seem to have shown signs of improved social connection for these families, as they got to network with people who could be good sources of job referrals but "the families may not be tapping those resources for jobs" (Ludwig, et al., 2014, p. 2). The "Moving the Opportunity" experiment concluded that mobility programs alone are not enough to help break the grip of poverty because "families need additional supports if they are to overcome their circumstances" (Ludwig, et al., 2014, p. 3).

Low-Income and Housing

Downey and Willigen (2005) argue that individuals living in or near a disoriented and environmentally hazardous community often feel helpless, depressed and fearful. These are significant chronic stressors that produces a negative impact on psychological well-being. This situation is most commonly observed among poor, low-income, working class, people of colour and minorities. They also discussed that the situation is exacerbated for these groups because due to their socioeconomic status, household responsibilities, and the ways economic hardship limits their access to resources to cope with stress, depression, anxiety and insecurities (Downey & Willigen, 2005).

According to United Way's report, Toronto residents' socio-economic status is connected to the city becoming a hub of vertical poverty, as Toronto's low-income population is growing more concentrated in high-rise buildings around inner suburbs (MacDonnell, Robinson, Mikadze, McDonough, & Meisner, 2011). Many of these buildings are in poor condition, their elevators are unsafe and unreliable, and the units infested with vermin and vandalism making it dangerous and unhealthy for individuals living there, resulting in depression, fear and anxiety. "In the past quarter-century, the percentage of low-income families living in high-rise apartment buildings rose from 34 percent to 43 percent (MacDonnell, Robinson, Mikadze, McDonough, & Meisner, 2011).

Green Space, Environment and Mental Health

According to Henderson-Wilson and Weerasuriya (2017), there is historical evidence dating back to early civilizations in China, Greece and Persia that claims contact with nature either through viewing or physically "being in landscapes with vegetation, water and other natural features relieves stress and provides human health benefits" (Henderson-Wilson & Weerasuriya, 2017, p. 85). The authors also claimed that in Europe the earliest hospitals were typically located in monasteries which had gardens and provided a peaceful and calming environment for patients. This increased the "level of social functioning, self-mastery and sense of coherence, and a significant reduction in symptoms of anxiety and depression as a result of participating in both active and passive therapeutic activities carried out in gardens" (Henderson-Wilson & Weerasuriya, 2017, p.85). Henderson-Wilson and Weerasuriya (2017) write that research shows living close to green spaces significantly mediates individuals resilience and life coping skills.

They conducted three small-scale Australian studies that investigated the relationship between green space and people's mental health and concluded that "time spent in green spaces can provide people with a range of opportunities to enhance their mental health" (Henderson-Wilson & Weerasuriya, 2017, p.87). Green space increases people's capacity to self-manage their mental illness, acknowledge the realities of their limitations, and seek support (Henderson-Wilson & Weerasuriya, 2017). Even though their study findings could not be generalized to the wider population, Henderson-Wilson and Weerasuriya recommend the inclusion of gardens or other green spaces into the healthcare plan.

Ruijsbroek and colleagues' argued there is growing evidence that neighbourhood green space, such as trees or vegetation, is beneficial for mental health because it increases the attractiveness of the common areas in the neighbourhood, which leads to the potential frequent use of it that may in turn promote, informal interactions between community members but their recent study revealed the opposite (Ruijsbroek et al., 2017). The link between neighbourhood green and social contacts is considered health promoting because it creates connectedness and solidarity among community members. Hence, green space may indirectly reduce loneliness and improve mental health. "Lack of social support and feelings of loneliness were reported to mediate the relationship between green space and mental health but not social contacts" (Ruijsbroek et al., 2017, p. 658). Ruijsbroek and his colleagues explore the relationship between neighbourhood green space, the neighbourhood social environment and mental health in four European cities. They found that neighbourhood green was related to mental health only in one city and there was no indication that neighbourhood social environment could be the mediator. Their study revealed no indications that improving neighbourhood green space could be relevant public health policy, nor were there indications that health benefits of green space would occur through the improvement of the neighbourhood social environment. They suggested further studies needs to be done to investigate the possibility of this mechanism (Ruijsbroek et al., 2017).

However, Hassen a junior fellow at the Wellesley Institute argues that the quality and accessibility of green space are more important for mental health (Hassen, 2016). Hassen defines physical environment and infrastructure such as parks accessible by public transit, trees and benches, children playground, dog off-leash areas in parks, as green space in the city (Hassen,

2016). She also defines less desirable physical environments as lack of meeting area, and green space, loud noise, not accessible transit, unsafe crosswalk, and a less walkable environment. She demonstrates how these are detrimental to mental health. Hassen correlates green space quantity and quality with mental health.

Barton and Rogerson states that there is "an urgent global need for accessible and cost-effective pro-mental health infrastructure" because mental health conditions are one of the leading causes of the overall disease burdening worldwide because of the estimated global cost of £1.6 trillion per year associated with it (Barton & Rogerson, 2017, p. 79). The current health care system has not managed this burden of mental disorder, and the gap between the need for treatment and its provision is getting wider every day (Barton & Rogerson, 2017).

Barton and Rogerson (2017) called "green space" an umbrella term used to describe either maintained or unmaintained environmental areas such as nature reserves, wilderness environments and urban parks (Barton & Rogerson, 2017). In urban society, green spaces are purposefully designed for resident recreational or aesthetic merits. The authors state that global urbanization has reduced access to and engagement with green space, but there is "good evidence of a positive relationship between levels of neighbourhood green space and mental health and well-being" (Barton & Rogerson, 2017, p. 80). Individuals living in urban areas with more green space show noticeably less mental distress, anxiety and depression, along with greater well-being and healthier cortisol profiles compared to people living in a less greenspace neighbourhood (Alcock, White, Wheeler, Fleming, & Depledge, 2014). Alcock, White, Wheeler, Fleming, and Depledge (2014) revealed that individuals who moved residence from "a less green to a more green area had been found to show significantly better mental health in the three post-move years, implying a sustained improvement" (Alcock, White, Wheeler, Fleming, & Depledge, 2014, p. 1248).

Barton and Rogerson (2017) suggest that physical activity in green spaces is defined as "green exercise" and there is a positive correlation between green space availability and physical activity level. The authors believe that physical activity at least partially mediates the positive relationship between neighbourhood green space and mental health and well-being. They

revealed that people who perform physical activity in the natural environment at least once per week have half the risk of poor mental health compared to those that do not do so (Barton and Rogerson, 2017). Physical activities in the "green setting enhance exercise-associated improvements in affective state and attentional capacity" and just by simply viewing nature during exercise can also enhance these outcomes (Barton and Rogerson, 2017, p. 80). Barton and Rogerson also explained that just being exposed to the natural environment is "psychologically restorative and has beneficial influences on individuals' emotions and ability to reflect on life problems" (Barton and Rogerson, 2017, p. 80). Therefore, the authors conclude that it is important to incorporate green space when designing buildings, healthcare facilities, social care settings, homes and communities to create communal spaces that can generate interaction and attachment resulting in mental well-being and an increased opportunity for green exercise (Barton and Rogerson, 2017).

Social Connection and Mental Health

Scholars Kawachi and Berkman (2001) argue it is generally agreed that "social ties play a beneficial role in maintaining psychological well-being" (Kawachi & Berkman, 2001, p. 458). In Sociology, it is well established that there is a link between social isolation and reduction of psychological well-being (Kawachi & Berkman, 2001). Depressive symptoms are linked with "smaller social networks, fewer close relationships and lower perceived adequacy of social support" (Kawachi & Berkman, 2001, p. 458). Kawachi and Berkman's main purpose was to highlight the four distinctive issues, stress reaction, psychological well-being, symptoms of psychological distress and depressive symptoms and anxiety that emerged from existing studies on social ties and mental health outcomes. They used Cohen and Wills (1985) "the main effect model" and "the stress-buffering model" to explain the mechanism by which social relationships influence health outcomes. The main effects model (Figure 1) suggests that social relations have a beneficial effect regardless of whether the individual is under stress, whereas the stress-buffering model (Figure 2) implies that social ties are related to well-being only for people under stress (Cohen & Wills, 1985).

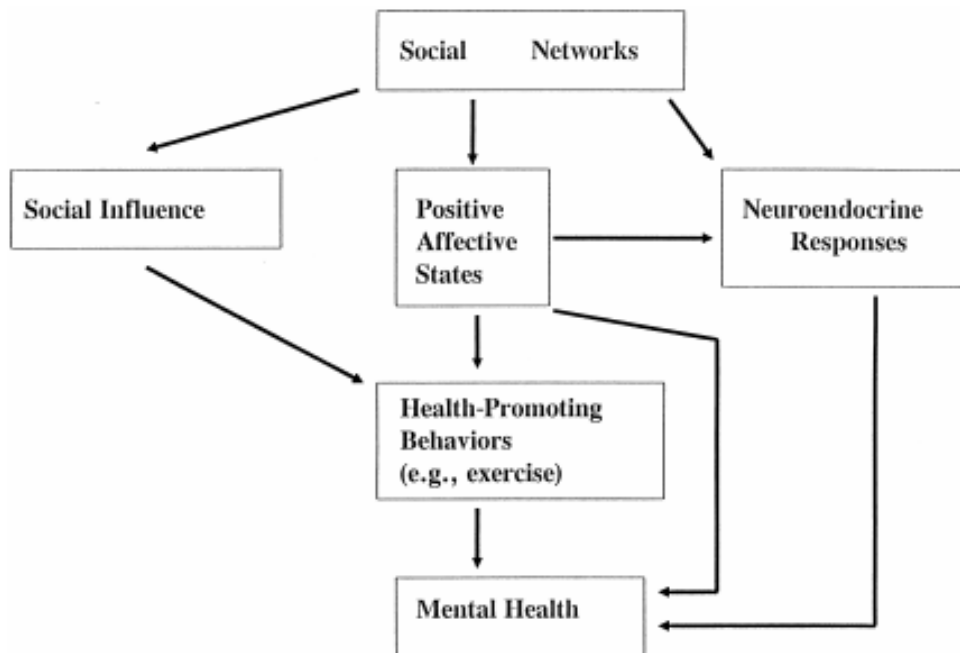


Figure 2: Main effect model of social ties and mental health (Cohen & Wills, 1985).

The main effect model (Figure 2) describes various pathways through which participation in social networks like health-promoting behaviours (e.g. physical activity) can positively affect psychological well-being because social ties create a sense of purpose, belonging, security and recognition of self-worth (Kawachi & Berkman, 2001). A positive psychological state can benefit mental health because it increases motivation for self-care and modulation of neuroendocrine response to stress (Kawachi & Berkman, 2001). Also, participation in community organizations, involvement in social networks and being in an intimate relationship increases the access to different forms of support which can prevent individuals from being isolated and distressed.

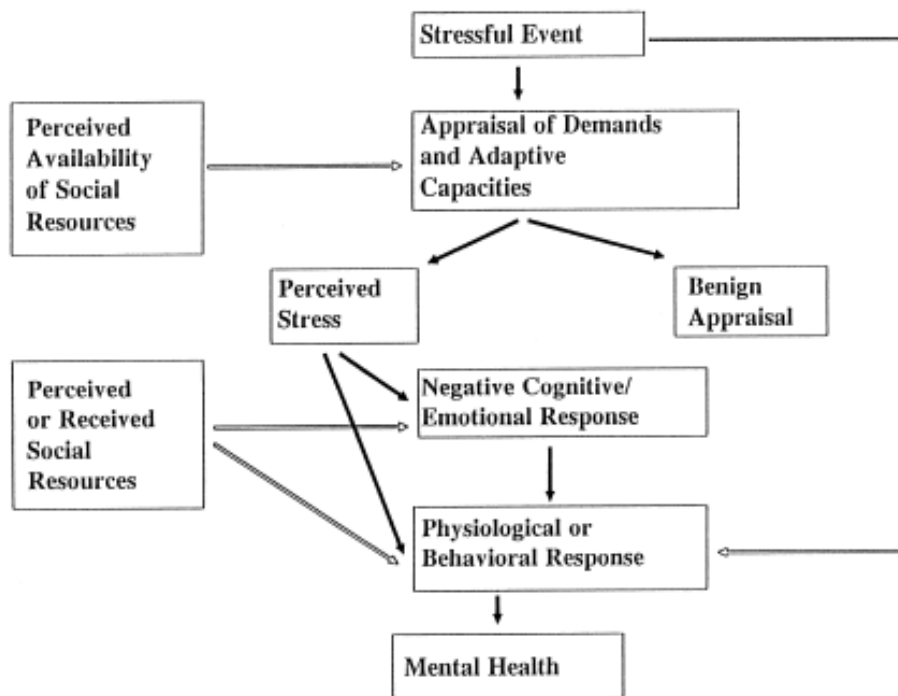


Figure 3: Stress-buffering model of social ties and mental health (Cohen & Wills, 1985).

The stress-buffering model (Figure 3) suggests social support is "hypothesized to prevent responses to stressful events that are damaging to health" (Kawachi & Berkman, 2001, p. 460). In this model, "support may act on several different points in the pathway between stressful events and eventual mental illness" (Kawachi & Berkman, 2001, p.460). The perceived or received support may either reduce the negative emotional reaction to a stressful event or dampen the physiologic responses to stress (Kawachi & Berkman, 2001).

Kawachi and Berkman also suggested that social ties on mental health can differ by gender. Studies have shown that women are reported to have higher rates of psychological distress than men partially based on the difference in genders involvement in the social network. Author Belle (1987) summarizes these differences and noticed that women tend to (1) maintain more emotionally intimate relationships than men, (2) mobilize more social supports during periods of stress than men and (3) provide more frequent and more effective social support to others than men do (Belle, 1987).

Kawachi and Berkman concluded that the association between social ties and mental health is well-established, but more work needs to be done in terms of explaining the mechanisms by which "specific aspects of ties lead to the maintenance or improvement of psychological well-being" and hence "proposing to refine the approach to effective intervention" (Kawachi & Berkman, 2001, p. 465).

Correlation between Neighbourhood and Environmental Injustice

Mohai and Bryant (1998) seek attention to the issue of environmental injustice on poor, low-income and minorities groups who live in environmentally polluted neighbourhoods surrounded by industrial facilities, commercial hazardous waste facilities and uncontrolled hazardous waste site. Mohai and Bryant noted that industrial and hazardous waste facilities are mostly located in impoverished areas when compared with whites and privileged communities (Mohai & Bryant, 1992). This unfair judgement and attitude made residences angry and frustrated as they continue to fight for having an equitable and fair distribution of environmental pollutants throughout the society.

Mohai and Bryant discuss this situation to be termed as environmental racism which is a significant social problem and has a negative impact on individual's mental health (Mohai & Bryant, 1992). They also used data from the University of Michigan's 1990 Detroit Area Study and found that respondents concern about their local environmental increased as their resident becomes located to proximity to industrial facilities and hazardous waste sites (Mohai & Bryant, 1998). This result shows that residences are aware of the industrial facility in their neighbourhood and want to avoid living in the heavily polluted industrial community. It challenges the assumptions made by business leaders, governments and mainstream environmental organizations that poor, working class and minority communities do not care about their environmental issues and pollution and health risk associated with it instead focus their attention on the availability of industrial jobs (Mohai & Bryant, 1998).

Bullard and Hofrichter argue that decisions about safe pollution levels, pollution migration and economic development are often made without consulting the local communities (Hofrichter, 1993). Instead, industrial and government decision makers often favour rich and powerful

communities, who are against having an industrial or hazardous facility near their neighbourhood, as they want the community to live in a clean, safe and healthy environment (Bullard R. D., 1994).

Geis and Ross (1998) discuss that people living in environmentally polluted and disoriented neighbourhoods do find industrial activities and the release of hazardous waste in their community noxious and highly undesirable. Moreover, because of this unfair treatment by the government and industrial leaders, disadvantageous communities find themselves in a weak and discouraging situation (Geis & Ross, 1998). Often, even after mounting complaints and lobbying, their neighbourhood is still chosen as a perfect location for industrial facilities and hazardous waste dumping sites. The authors point out that communities with money and power get their environmental issues addressed whereas poor and struggling communities are left to suffer. Being forced to live in a toxic environment makes members feel they have little control over, and this results in increasing psychological distress (Geis & Ross, 1998). Therefore, industrial and hazardous waste activities near poor or work-class neighbourhoods can be characterized as a chronic stressor for the residents.

Summary

In summary, this literature review shows that there are many factors that link mental health with neighborhood environment – including, environmental racism and exposure to toxic hazards, access to green space, exposure to crime, social connections, low-income and housing. After analyzing all this literature, I hypothesize there is a connection between neighborhood characteristics and mental health.

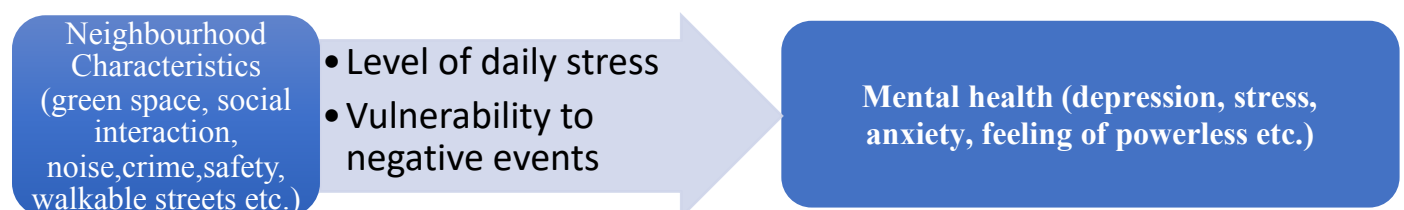


Figure 4: Hypothesis - relationship between neighbourhood characteristics and mental health

CHAPTER THREE: METHODS

Research Project Design



Figure 5: Research Design and Methodology (Adapted from Creswell, 2007).

In my research study, I used both primary data to gather information specific to my research problem and secondary data to assist me in analyzing and supporting my study findings. Primary data are the “original data collected for a specific research goal,” and secondary data are the “data originally collected for a different purpose and reused for another research question” (Hox & Boeije, 2005, p. 593). I took the qualitative data analysis route and used the interview method as the principal process for obtaining my primary data because it used “data involving understandings of the complexity, detail, and context of the research subject, often consisting of texts, such as interview transcripts and field notes or audiovisual materials” (Hox & Boeije,

2005, p. 595). As illustrated in Figure 5, I undertook a series of interrelated activities to gather relevant data that assisted me in answering my emerging research questions.

Methodology

Step 1: Locating Site

I started by locating two research sites in Toronto. David Hulchanski divided Toronto into three distinct cities. City 1 consists of neighbourhoods with highest income increase since 1970, located near Old Toronto's central city subway lines. City 2 is the neighbourhood occupied by middle-income residents. City 3 consists of low-income neighbourhoods which are spread out to the city's inner suburbs (Hulchanski, 2010). I wanted to choose one neighborhood in City 1 and another in City 3 in downtown Toronto to contrast residents' diverse experiences.

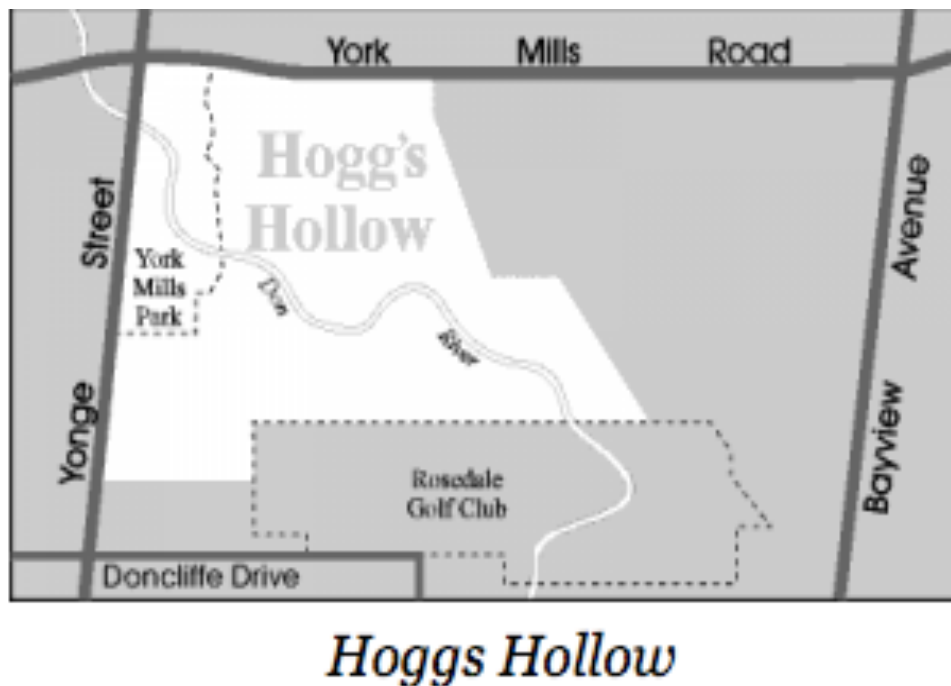


Figure 6: Location B-Map of Hogg's Hollow neighborhood (Association T. Y., 2018)

For my research study, I picked one site from City 1 – The Hogg's Hollow neighbourhood located between York Mills in the north and Yonge Street in the west. The demographics for residents in this area are first, second and third generation affluent settlers from Western and Northern Europe, Iran, China and Korea and fall under the high-income category with average

household incomes range from \$100,000- \$400,000 (Spracklin, 2014). This neighbourhood is home to Toronto's successful lawyers, doctors, CEO's, city builders, businessmen and politicians (Spracklin, 2014).

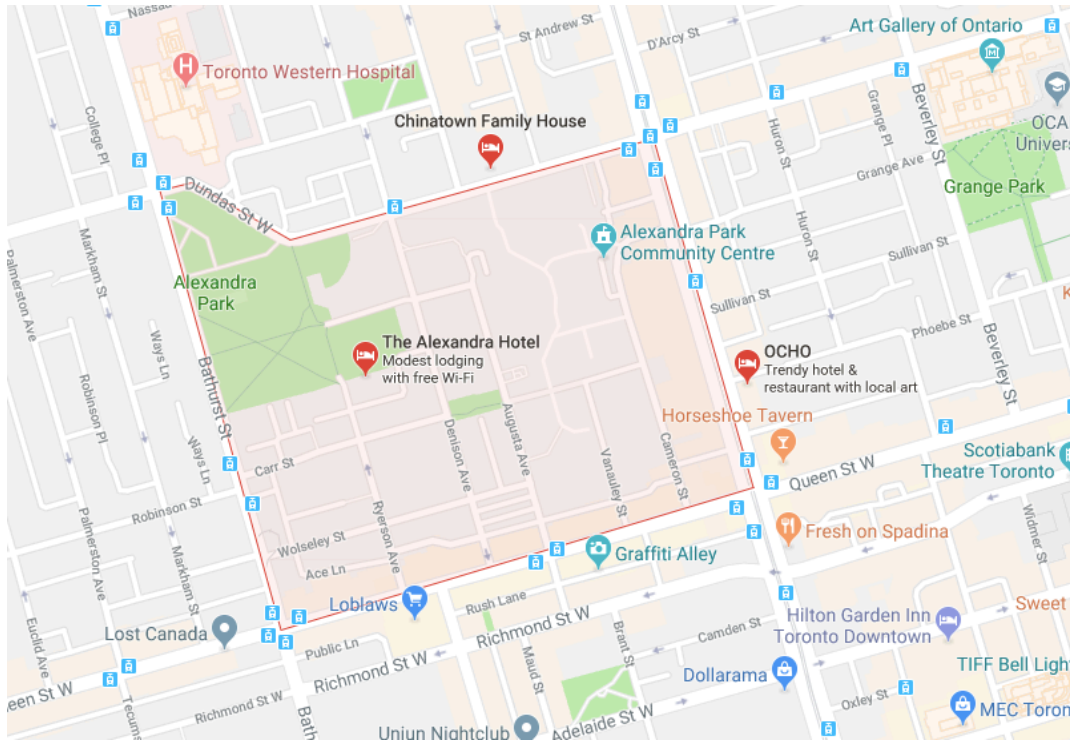


Figure 7: Location A- Alexandra Park Neighbourhood Map (Monsebraaten, 2017)

The second neighbourhood selected from City 3, Alexandra Park, is located downtown and bounded by Dundas Street West on the north, Spadina Avenue on the east, Queen Street West on the south, and Bathurst Street on the west. I choose this neighbourhood because in 2011 this area was ranked "2nd in sexual assaults, 3rd in drug offences, 7th in the break and enters and robberies and 8th in assaults" (Spracklin, 2014). This community consists of private and public housing, large institutions such as Centre for Addiction and Mental Health (CAMH) and Toronto Western Hospital, and commercial buildings (e.g. China Town and Kensington Market).

These two sites were my primary targeted locations for my research study. I recruited ten volunteer participants, five from each area. Data retrieved from both sites gave me the opportunity to compare information between affluent, high-income and poor, low-income

neighbourhoods. It also allowed me to contextually analyze the relationship between neighbourhood environment and mental health in Toronto.

Step 2: Purposeful Sampling

Along with finding people or places to conduct the study, it was significant to establish a good relationship with the participants and ensure their privacy and confidentiality so, they feel comfortable providing me with useful data (Creswell, 2007). I received ethical approval from FES' REB.

I determined a strategy to obtain a purposeful sample of individuals. For my research study, I created an email address, phone number and a flier (see Appendix C). I distributed the flier at the TTC bus stops, community centers, Facebook community groups, daycare centers, and parks (Alexandra Park and York Mills Park) of both neighbourhoods. I reached out to the executive director of Alexandra Park Community Centre and the Volunteer Coordinator of Hogg's Hollow to advertise my study and recruit people.

It was challenging to recruit participants from Alexandra Park neighbourhood. I got no responses from all the fliers and networking. During the recruitment process, I walked around the neighbourhood and asked people if they were interested in participating in my study. A lot of people in the neighbourhood appeared intimidated as I approached them because English which was not their first language. I also struggled to find people who would fit my study criteria, as a lot of them were not involved in community activities and simply expressed they did not care. Initially, I wanted to choose a quiet location for my interviews and anticipated that they would be 45-60 minutes each. To improve response rates, I approached folks at the park. Several young mothers at the Alexandra Park playground refused to participate because they were watching the kids. It was suggested by multiple residents to shorten the interview time and do them on the spot. I ended up doing most of my interviews in this neighborhood in the park. While it was quite noisy, and we sometimes got interrupted in the middle of my interview by their children, this proved to be our most successful strategy. My longest interview from this neighbourhood was 45 minutes, and the shortest was 27 minutes.



Figure 8: Hogg's Hollow Volunteer Appreciate Party poster.



Figure 9: Hogg's Hollow Volunteer Appreciation Party.

With the Hogg's Hollow neighborhood, I faced different challenges reaching out to the community members, as they were very busy individuals. Eventually, one day as I was walking around in the area and I noticed a sign (Figure 8) about the York Mills Valley Association (YMVA) Volunteer Appreciation Party. I emailed the Volunteer Coordinator, and she was very

helpful. She instantly invited me to the party (Figure 9) and connected me with five individuals who met my criteria. But my challenges came with setting up a meeting time with them. These individuals were enthusiastic about doing a 45-60 minutes interview but struggled to arrange a time to meet up due to their busy schedule. I had participants who initially agreed to do an in-person interview but later could not find the time and requested to do a telephone interview. I respected their request and ended up conducting two telephone interviews from Hogg's Hollow. I also had a participant who withdrew from the study after being interviewing. As per my ethical protocol, all their associated data were destroyed. I subsequently replaced her with another participant. My research study was open to both genders male and female, but I was only able to recruit females. No male participants were interested in participating.

Ultimately, I recruited 6 participants at from Site 1 (high-income, Hogg's Hollow) and 5 at Site 2 (Low-income, Alexandra Park). Because 1 participant from Hogg's Hollow decided to withdraw after their interviews, I was left with a final total sample of 10.

The inclusion criteria for my participants included being:

- 18 years or older
- a parent at least one child under the age of 12
- a resident of either Hogg's Hollow or Alexandra Park neighbourhood for 4+ years
- Involved and participating in some community activities.

Step 3: Collecting Data

I wanted to conduct face-to-face in-person interviews so that I could have a clear, flexible and adaptable structure, that facilitated personal interaction and informal communication with the participants while also allowing me to take notes and audio record the conversations (Creswell, 2007). The interview process allowed participants the chance to speak and share their ideas freely and for me to observe their physical stimuli. The answers from the participants gave me an in-depth understanding of their neighbourhood and helped me to investigate my research questions. The in-person interview method allowed me to complete my recruitment and collect my data within a short period. I had eight open-ended questions that narrowed the central and sub-questions in the research study. I made sure there was ample time between each question for

me to make essential notes while the participants answered the questions (see Appendix D for a sample interview guide).



Figure 10: Alexandra Park's playground.

For the interviews, I picked convenient, flexible neighborhood locations according to participants choice. For example, Alexandra Park residents were not available to meet separately so I interviewed them in the park (Figure 10) while they were watching their kids. On the other hand, Hogg's Hollow residents were more interested to chat separately. I interviewed the two working mothers at Starbucks during their lunch time, one resident invited me to her house and two couldn't find time to meet up, so I conducted telephone interviews with them. I provided each participant with the informed consent form at the beginning of the interview or a few days before the interview date (for telephone interview) confirming their consent to participate in the study. As part of the consent, I explained the study, risks and benefits associated with it, confidentiality, audio recording the conversation, the time required to complete the interview and my plans on how I will be using the results from the interviews (Creswell, 2007). My total interview process took approximately 27– 60 minutes per person and I tried my best to stay true to the time specified. During the interview, I kept to my interview questions and tried to be a good listener, respectful and always courteous.

Step 4: Recording and Storing Data

While conducting my interviews, I took notes, and audio recorded the conversation as the participant gave his/her responses. I created a study log in Microsoft Excel to keep track of my recruitment list and study data. I assigned my participants a study code to conceal their identity and protect their privacy. Also, I stored paper documents of the interview in a secure file, and password protected the electronic data and backup on my computer.

Step 5: Data Analysis

Analyzing text and multiple other forms of data can be a challenging task. Each audio-recorded interview was transcribed prior to data analysis. When analyzing data from my interviews, I strategized to look for code segments that I can use to describe information and develop themes (Creswell, 2007). As a qualitative researcher, I looked for the following codes:

- Information that represents what I expected to find before I started the study.
- Look for surprising factors, links or information that I did not expect to come across.
Retrieve and represent information that is conceptually interesting and unusual to me and potential participants and audiences.

Additionally, I created a master table to assist me with organizing key information's, common themes, differences and quotes associated with my main and subsequent interview questions from each interviewee from both Alexandra Park and Hogg's Hollow neighborhood. I also produced two tables (see Appendix B) summarizing my participant's demographics and the method of recruitment.

Step 6: Synthesis, write up and knowledge mobilization

I examined the data collected and investigated for links to support my hypothesis. A thorough literature review was conducted to refine themes. My secondary data sources included academic literature, news media, non-government agency reports and government reports. Lastly, I summarize my research results, discussed my findings and transferred the knowledge through this paper.

CHAPTER FOUR: RESULTS

Results and Data Analysis

This section discusses the ten interviews I conducted in Alexandra Park and Hogg's Hollow.

Neighbourhood Demographic

Alexandra Park

In Alexandra Park I had participants from various ethnic background like Phillipino, Chinese, Caucasian and Jamaican. All my participants in this neighbourhood have lived in the community for more than five years. I had one participant who was born and raised in this neighbourhood and lived there for more than 36 years (Interviewee B). I had another participant who lived in the neighbourhood for 20 years and was very knowledgeable about the area but seemed worried about being recorded and did not consent to audio recording our conversation (Interviewee C). I had two participants, Interview D and Interview E who moved into the area 8 and 5 years ago respectively right after they migrated to Canada. My most community involved participant was Interview A who lived in the neighbourhood for 10 years. All my participants from Alexandra Park had at least one child under the age of 12. Interviewee B and Interviewee D had the most number of children, three and two kids respectively. Four out of five of my participants in Alexandra Park are currently working. Interviewee C is not working and taking a break. The education level varied among my participants, two (Interviewee B and E) completed high school, two (Interview A and C) completed college degree and one (Interviewee E) had a nursing degree. The participants in this neighbourhood were diverse and spoke multiple languages English, Tagalog and Chinese. All five participants were involved in at least one community activity and participated in various neighbourhood activities like the group clean-up, gardening program, pedestrian Sunday walk, neighbourhood tai-chi and community centre volunteer program. Three participants (Interviewee A, B and C) in Alexandra Park believed their neighbourhood to be working class, one (Interviewee D) thought it is a middle-class neighbourhood and one (Interviewee E) thought the neighbourhood is gentrifying. None of the participants thought their

neighbourhood to be poor or affluent because they were meeting the necessity for living but didn't have the luxury of an affluent neighbourhood.

Hogg's Hollow

All my participants from Hogg's Hollow were Caucasian and have lived in the neighbourhood for at least four years. Two of my longest Hogg's Hollow residents (Interviewee H and I) lived in the neighbourhood for 12 years. I had two participants (Interviewee F and J) who lived in the neighbourhood for nine years and my participant (Interviewee G) with the least number of years in the neighbourhood lived for four years. All five participants from this neighbourhood have at least one child under the age of 12. The highest number of children that my participants (Interviewee G) had was four and the lowest number of children was one (Interviewee I). I had two participants (Interviewee F and G) who are currently working and three (Interviewee H, I and J) not working and focusing on raising their children. My participants from this neighbourhood were highly educated, four out of five participants had a master's degree and one had a bachelor's degree. All five of my participants had English as their language spoken and were very socially active in the community. They participated in various neighbourhood activities like The Valley Fair, Wine tasting, Cookie exchange, Clean-up day, Mom's/ ladies group, Two adult social parties, York Mills Valley Association (YMVA) member, Book club and many others. All of my participants from Hogg's Hollow said their neighbourhood was affluent because of the income and housing prices.

Findings from Alexandra Park and Hogg's Hollow neighbourhood

All ten participants from Alexandra Park and Hogg's Hollow neighbourhood were asked the same set of questions related to their neighbourhood environment, mental health, and whether they see a connection between the two.

Alexandra Park

Neighbourhood Characteristics

I asked my participants from Alexandra Park to tell me about their neighbourhood. Three of my Interviewees A, B and D said most of the people live in "co-op housing" in this neighbourhood.

The housing conditions in these government buildings are not good because they are not maintained well and are left dirty and unclean. Tenants face multiple issues like pest infestation, break-ins, dirty carpets and windows, waste not being properly disposed and over flow of garbage chute and smell coming from it. Tenants have complained about these issues, but it is not being addressed regularly or on time. Interviewee D shared there are moments when there has been a shooting incident in her building and the next morning residents notice blood stains in the building carpet. It takes a long time for the management to clean it. This results in mental depression and stress in her because she is reminded of living in a dangerous building but feels powerless because she cannot do anything about it because of her financial condition. She also faces challenges when her young children ask her about it and she does not know how to answer them. She also mentioned sometimes buildings are “quick to renovate new apartment units but increases the rent which makes it harder for residents.” Interviewee C said looking at the older houses and buildings in the neighborhood covered in dirt and graffiti makes it “an unattractive neighbourhood.”

Another common concern that was raised by all my Interviewees was the “drunk and homeless people” that are noticed lying in the neighbourhood parks. Interviewee B said, "people got drunk in the park, drunk in the street, homeless people stay corner all day." Interview D and E shared that because there is not enough space available in the homeless shelters or resources and services available to help these people they become victim to their mental health challenges and alcohol addiction and end up in the street. Interview D said: “Homeless and mentally ill people begging for money every day in the neighbourhood can be frustrating because it put residents in an awkward position in front of their kids feeling the pressure to pay when their own financial situation is not the best.” Interview E expressed that she feels terrible and helpless looking at these “mentally unstable” and “volatile” people not getting any assistance and left to their own devices. She believes that providing more housing for mentally ill people prevent them from begging on the street or chasing after people for money. She shared that she is not financially stable herself but tries to help them whenever she can.

Interviewee E said: “There's money to house them and predetermine their path by giving them a house to live or renting a room whatever. You're not going to see them on the street. It does wear me out because I feel it. I feel their pain and there's nothing I can do.”

Interviewee A and D shared their concern as young mothers with the Alexandra Park Community Centre activities that are available for young children. They shared that the community activities are very expensive, and it becomes a struggle financially and emotionally when it comes to putting their kids for summer activities. Most of them try to opt out for the City of Toronto program that are available for children because there is a small fee associated with it, but it is really tough to find spots because it gets filled up very quickly. Interviewee D said: "I think it's more like community programs are more expensive. I find like even the City of Toronto activities for the kids, it's like hard to get into as well [...]it's paid but it's a small fee but it's like you have to register really quickly, like as soon as they're open." Not being able to afford to put their kids in sports or other activities makes them feel a failure as parents and that depresses them resulting in a negative impact on their psychological well-being.

Neighbourhood Environment and Mental Health

When I asked, "Do you think there is a relationship between your neighbourhood and mental health?", four out of five interviewees said "Yes" (Interviewee A, B, C and D) and one said "No" (Interviewee E). Three out of five participants (Interviewee A, C and D) stated that where people live has an impact on their mental health and interviewee A shared "Yes, especially coming here from back home from the Philippines you never know what experience you will face you have a culture shock." Most of my participants are immigrants to Canada and they expressed that back home there is no playground for their kids to play on. Those that did exist in their home countries were not safe for them to go outside and play. Several participants described episodes of kidnapping, shooting and gun violence happening in the neighbourhood "back home." They talked about their kid's reaction and the happiness that brings to them just from playing in the playground located in Alexandra Park. Interviewee D said it was her kids first time playing in a splash pond because in Jamaica there is no playground or parks and a lot of gun violence and crime that has traumatized her children. She shared that being able to let her kids go outside and giving them the feeling of safety and freedom has built their confidence and had a positive mental well-being impact. Playing outside allowed them to interact with other children and made them more social and outgoing as they were shy before. They could build a

friendship with other children. Interviewee D said, “this neighbourhood park allowed them to have a real childhood.”

Interviewee D also mentioned “sometimes people are shy to say “Hi” in the neighbourhood or appear mean because English is not their primary language and they don’t speak it well to have a conversation or express what they are saying.” Two of my interviewees A and C said, “language is a barrier in this neighbourhood because most of the residents do not speak English”.

Interviewee A, B and C said, there is a “lot of green space for people to meet up” and Interviewee D said, “lots of green space in the neighbourhood but not in schools, it is mostly cement”. Interviewee E said “Never enough green space period. But this is a nice chunk right here.” The participants believe that having green space allows people to come outside and socialize. There is a lot of Asians in this neighbourhood that do not speak English and Alexandra Park creates opportunities for these individuals to come outside and meet people from the same ethnic background who speaks the same language and allows them to make social interactions and form friendship that prevents them from being locked inside their home or experience isolation and loneliness. Interviewees A, B and C believes that “social interaction lessens mental health issues.”

One of my participant (Interviewee D) expressed that staying home all day and taking care of little kids can take a toll on young mother’s mental health by making them feel depressed and lonely. So, having a place in the neighbourhood where they can walk, get fresh air and connect with nature can mentally help relax their mind. Participants also believed that having a quiet neighbourhood can help people focus and concentrate. This peacefulness can help feel at ease and contribute to positive mental well-being.

Participant E expressed that “a neighbourhood depends on money and therefore the neighbourhood environment is built on the resources that is available which is conducive to good mental health. If you have money and have good choices with how you use it, [it] can help create good mental health otherwise it doesn’t.”

Violence and Crime

In Alexandra Park when I asked the interviewees “What don’t you like about your neighbourhood?”, four out of five interviewees said, “violence and crime”. The participants said there is a lot of incidents of “gun violence” and “shooting” happening in the neighbourhood. They frequently hear about someone getting shot in the area. Sometimes they wake up in the middle of the night hearing gun shots in their building and police warning residents to stay inside their apartments as they work towards catching the gun man. Interviewee A said: "There is shooting ... mostly shooting and gun violence mainly because when they built all the condominiums here there is so many people now and there is so many clubs and bars along Queen and king street so, like almost every weekend there will be something in the news about it." Interviewees also informed that drug dealings and assaults were commonly noticed in the neighbourhood. This mostly happens near the community center, co-op housing and sometimes on school ground among young high school children. Interviewee B said: “We have so many community housings in here where some of the bad things are happening.”

They also shared stories about vandalism, stealing and breaking-in incidents happening in co-op housings and convenience stores located at the bottom of their building. As most of my participants have young children they showed concern about their young children’s safety and mental health because a lot of the times the kids see a section of their building being blocked off by the poice and they would ask why there is a “yellow tape” or “red stain” on the carpet. These kinds of questions often put parents in an uncomfortable situation as they don’t want to expose their kids to the topic of violence and scare them at such a young age. They want their kids to feel safe in the neighbourhood even though as parents they are worried and mentally stressed about their safety. Some of my participants encouraged their kids to talk about any pressure or stressed they are feeling from their surroundings.

Interviewee A said: “For me it is really important that’s why I keep telling my children you have to talk to me you have to [...] if you want to debate, then debate with me, you want to answer back then answer back. I said that’s the way you can only release your emotions through your emotions. You don’t have to keep it to yourself. I said because that will kill you mentally you have to release it. I want them to really express themselves because for me if you do that they

will get less depressed and open up about their experience, pressure and any mental health issues.”

My interviewees also mentioned how some of their kids are scared and traumatized by the sounds of gun shots and as parents they feel powerless and depressed as they fail to provide their children a safe environment and have to tolerate it.

Interviewee A said: “because of the violence, there is so many going on... but not really that bad ... sometimes it is tolerable.”

The participants also mentioned about how they feel concerned and unsafe to let their kids stay outside unattended and too late at night in the neighbourhood because they don’t want their children to get influenced by the “bad crowd” often associated with drug dealing and vandalism. As most of my participants are immigrants they often get intimidated by the police and informed their young children get frightened as well when they notice police in their building or neighbourhood. There are police frequently monitoring and patrolling the neighbourhood which constantly reminds the participants that they live in an unsafe neighbourhood even though they know police are here for their protection and safety. Some of the neighbourhood buildings have hired a security guard but residents wonder “how much protection can one person provide”.

Neighbourhood Activities

When it came to recruitment I wanted to select participants that were involved in their neighbourhood with the intention that they will have a better response on my research study questions. I asked my participants “What kind of neighbourhood activities are you involved in?” Interviewee A responded saying she is involved in the Gardening program in the neighbourhood where residents gather once a year in the summer to plant trees and flowers in the neighbourhood parks to make the community look beautiful and environment friendly. She also shared about being involved in the group clean up event where she would meet up with few other community members and pick up waste like plastic bags, water bottles, paper etc. and any recyclable materials from the neighbourhood streets. She is also an advocate on how to be environmentally

friendly and properly dispose waste in her co-op building. Unfortunately, even though she mentioned being involved in neighbourhood activities but had no idea if there were any current environment promotional events happening in the neighbourhood and was quoted saying:

Interviewee A said: “I am not really sure what are the environmental events that are happening right now but most of the time there will be a group of people here doing something like for the environment. I can see sometimes they are doing the clean-up. I think it’s mostly charitable group too who are doing that one which is good.”

Interviewee D responded “you don't realize the impact that you do you have for other people until you're not there for a week or so. And they're like, you know, they really enjoy it, you know [...] sometimes people come there for you know to escape and probably a lot of people do come for like motivation and stuff like that [...] try to escape and make the best thing, be positive and uplifting to lift their mood.”

She is a volunteer fitness instructor at the local YMCA. She feels great meeting and interacting with people through this activity. She expressed that everyone comes in to the class with their daily stress, problems and worry, looking for an opportunity to escape from it momentarily and to be motivated, feel mentally positive and uplift their moods through their workout. Interviewee D shared that doing physical activities releases endorphin a chemical she called “happy hormone” that is a phycological benefactor because it helps improve self-esteem and provides positive and energized outlook on life.

Interviewee D said: “Working out has really helped me with my self-esteem and stuff. So, I try to motivate people to not be shy. You know, God gave you one body, you are born with what you have exact. So just enjoy, you know [...] Be Proud of your body and just proud of yourself.” Interviewee D also shared that in her neighborhood when people come in to the class you don’t know what they are going through or what kind of mental state they are in. She has seen incidents where she was doing Zumba with a resident at the YMCA in her neighborhood and the following day she heard about that individual committing suicide. This kind of situation mentally disturbs her and makes her realize that mental health is a “serious issues” in her community.

Interviewee D was quoted saying: “And that one person, I'll never forget him committed suicide. I was dancing with him all the time. Like he was always behind me and so I always take his story like I didn't know him personally, but I take his story that not everybody that comes in with the stuff out the door”.



Figure 11: Alexandra Park residents doing Tai- Chi in the park

I had another participant (Interviewee E) who is the neighborhood’s weekly Tai-Chi organizer (Figure 11). She communicates with the residents and the Tai-Chi master who lives in the neighborhood and organizes weekly Tai-Chi classes in Alexandra Park. She said “Tai chi helps a person's mental health” because it lets people shut out all the noise, stress and other things running through their mind and takes them to a peaceful place where they can relax and away from all the city’s hustle and bustle.

Crowding, Noise and Commute

Three of my interviewees (A, B and C) shared that Alexandra Park neighbourhood is located downtown. It is bounded by Dundas Street West on the north, Spadina Avenue on the east, Queen Street West on the south, and Bathurst Street on the west. It is a very crowded

neighborhood that is close to China Town, Kensington Market and Hospitals like Toronto General Hospital and The Centre for Addiction and Mental Health (CAMH). Interviewee A said, “The noise is because of the crowd.” My interviewees shared that the neighborhood is suffering from residential crowding due to large number of people living in a small amount of space. The neighborhood is composed of apartment buildings, condominiums, row houses and other types of housing. There is also sign of household crowding as the interviewees revealed their apartments and houses are small because of lack of space. The participants expressed that living in a crowded neighbourhood makes them feel stressed and anxious. Interviewee D informed that roads in this neighbourhood are dirty and high in traffic, it is congested with lots of cars, streetcars, buses, motor bikes, trucks and bicycle which produce a lot of noise. She also mentioned that during summer time there is a lot of road constructions that takes place in the area which also creates high level of noise which distracts residents’ concentration and prevents them from focusing on their daily activities. Looking at the dirty roads also makes them feel insecure and unwanted. She shared that due to construction, TTC buses and streets often get diverted and this is not communicated to the commuters in the neighbourhood. This results in stress and depression among residents when they are hurrying to reach work on time, dropping off kids to school or day care center.

Hogg’s Hollow

Neighbourhood Characteristics

Green Space

I asked each of my participants “Do you think there's enough green space in the neighborhood?” All my interviewees responded by saying “there is enough green space” because the neighbourhood has two parks; Brookfield Park smaller park which includes a playground and a fairly large hill that is used for sledding and tobogganing in the winter. The other large municipal park York Mills Park is mostly for dogs and dog walkers as there is lots of pets in this neighbourhood.

All five of my participants described Hogg’s Hollow as “beautiful”, “natural” and “fairly quiet and safe.” Interviewee F and I shared the neighbourhood has a “wonderful location and topography with lots of mature trees and beautiful visual environment” which is mentally

peaceful. Interviewee G and J shared they liked how the neighbourhood is secluded from the busy crowded city and it is situated in a valley giving the “country side feeling.”

Interviewee I was quoted saying, "I love that it's such a, well treed natural environment. Many of the areas are protected, we have a lot of ravines. The Don Valley River runs through the neighborhood, so all of that makes for a beautiful place to live, but also the people, have been very welcoming since we moved."

Interviewee G also shared that the Don River Valley runs through the backyards of the properties and salmon fish can be noticed jumping in the Fall. She mentioned there are lots of animals in the community like red squirrels, coyote, bunnies and birds singing in the neighbourhood. She once noticed an opossum in her front yard and was surprised to see it because she didn't know they existed in Ontario. She said all these environmental aspects of her neighbourhood makes her very “happy” and “excited” because she doesn't know what more she will discover this neighbourhood.

Interviewee F believes having green space and connecting with nature have a connection to mental health because it allows people to lessen mental distress, less anxiety and depression. She adds that humans have a primitive connection to nature because it does not judge us and allow us to be ourselves. She said “nature lets us relax and feel comfortable and takes us away from all the societal criticism and judgement”

Pollution

Interviewee F, G, H and I shared there is “no pollution related concern in the neighbourhood and everything is good.” Interviewee I said, “it is a well-treated neighbourhood, residents take pride in their neighbourhood and does not contribute to pollution or debris” and interviewee F said "I think we have a very good handle on the pollution. I haven't been upset by pollution in the neighborhood. I think we do a good job of keeping it clean."

Interviewee J also had wonderful things to say about her neighbourhood but shared one concern regarding the golf course in the community. She said “the golf course still uses lots of pesticides

and herbicides and that run-off into the Don Valley River that runs through the neighbourhood. So, when golf season is over people use it to walk. This is concerning because some residents complain about their dog's paws change colour from all the chemicals. It's a green space but not really a green space.”

Housing

All five participants from Hogg’s Hollow appeared happy and proud of their houses. They shared the property value is high and people take “pride in the ownership” of their homes. People maintain their property accordingly and it is rare to see a home in “despair” or “need of attention.” Interviewee J mentioned over the years the neighbourhood has changed in terms of the crazy real estate market and interviewee G said “I would just say strictly based on the homes, the retail value, they're very, they're high end, very expensive. Especially today they're ridiculously high. It just keeps going up there. Almost touchable. It's crazy.”

School and Community Centre

Participant G and J said their neighbourhood have more options when it comes to schooling because residents are pretty well off and can send their children to private school, public school, French and immersion school or Catholic school. Even though this is a positive aspect for parents, but it concerns interviewee J and said “it is hard for kids to make friends right in the neighbourhood because most of them are scheduled with activities and a lot of the residents go to private schools. So, they don't get to develop that relationship.”

But interviewee H and I shared a different view, they said there are lots of extracurricular activities that overlaps between the neighbourhood children because during mom’s/ ladies group get-together mothers discuss about places that are good for kid’s activities and sometimes end up putting their kids in the same place for certain activities. They also shared that the neighbourhood tennis court is a good place where kids get to interact with each other in the summer.

Interviewee J mentioned the neighbourhood has the Earl Haig Community Centre but most parents from Hogg’s Hollow do not sign up their children for the activities offered by the

community centre and prefer to have private lessons instead. When asked parents “What kind of extracurricular activities their kids are involved in?” All of them answered that their kids are getting private lessons for either karate, piano, dance, hockey, swimming, cross country skiers, tennis, hockey, rugby and many others. It gives them a sense of pride when they see their children excel and accomplish things at a young age. But interviewee J pointed out that even though she cannot speak for the entire neighbourhood but noticed kids suffer from anxiety with the pressure to succeed and please their high-profile parents.

Neighbourhood Governance

My participants from Hogg’s Hollow shared that the neighbourhood has an ongoing social committee that is formed as a rate payers group called the York Mills Valley Association (YMVA). “The committee is formed where everybody sits down and make decisions about it, where a board is elected each year, like the president, vice president, treasurer, secretary, and then we have various portfolios. So, someone's in charge of roads mainly because they've slowly been redoing all the roads in our neighborhood and that some of the drainage and hydro. So, that's been a big job. Some liaises with the city, makes sure the residents needs are taken into account. There's also a development committee just keeps an eye on the houses that are proposed to rebuild and report those to the committee of adjustments that keeps on top of all of that to make sure they're not pushing the boundaries of the host sites too much” said interviewee J. She further added “the social committee is part of that too, and there's a beautification committee [...] we all pay dues every year and some residents can choose to also give extra for beautification, so that's just spending some of our residents money on things like the putting benches in the park and we've got two that are waiting to get put in [...] just to recognize the postman in our neighborhood. The beautification committee also takes care of you know, planting flowers or working to change our street signs to ones that had the Hogg’s Hollow tree on it.”

Interviewee F shared the YMVA maintains the aesthetic of the neighbourhood that prevents builders from coming in and building enormous condos and towers and protect the residential aspect of the neighbourhood. The rate payers group helps retain the characteristics of the neighbourhood which is described as "the country in the city." She also mentioned the YMVA established the community’s road-digging and repaving, sewer and water maintenances program

for the last 6 years. Interviewee I added the neighbourhood street representative-make sure the membership is maximized in our neighbourhood association and promote the rate payer's association and ask neighbours to consider joining and becoming a member.

All the interviewees like that YMVA's primary goal is to help take care of the neighbourhood and the residents. They shared YMVA makes them feel secure and content because their concerns and complains are being heard and taken care of at a reasonable time which gives them a mental satisfaction.

Neighbourhood Environment and Mental Health

I asked all five interviewees from Hogg's Hollow "What is mental health and how important is mental health to you?" and they responded that it is "extremely important." They expressed that "mental health is an important issue and the frustrating part of mental health is that you cannot see it and it is not something that is obvious." Interviewee G and H stated that "mental health is your state of mind, all about the brain and it is very important." Interviewee I said: "Mental health is welling being emotionally and psychologically." Interviewee J said: "Mental health means being comfortable with who you are, having the tools to deal with whatever's thrown at you, feeling really comfortable."

Then I asked my participants the big question "Do you think there is a relationship between your neighbourhood environment and mental health?" Interviewee I and J responded by saying "Yes, there is a connection." Interviewee I elaborated her response by saying "certain areas of the city where you're more concerned for safety or just noise and business. It would definitely have an impact on your health, your peace. My kids have always, ever since they were little, you know, if they're upset or there is something bothering, we always go outside right away and just being able to walk around and play it seems to really help with whatever's been bothering them or me."

Interviewee G and H said "No, I don't see a connection" and interviewee H elaborated her response by sharing "I mean you hear of celebrities committing suicide as well as people that just can't make ends meet. So, mental health doesn't seem to have a boundary in terms of where you live."

Interviewee F said, “cannot definitely said yes or no” because there are people in very affluent neighbourhoods not happy and have mental health issues and there are people with not the same level of income as affluent individuals or don’t have a lifestyle at the same level but still have a very positive outlook on life. She further added that people's income level will in large part dictate the neighborhoods that they live in but there is no direct relationship between neighbourhood or income and mental health.

Interviewee F was quoted saying: “So, you know, I think it's tempting to say that there would be a correlation, but I don't think I could say that with certainty because I've been caught off guard. I think that people would tend to think that people that have money are going to have less mental health issues, but mental health and your income level, I don't think there's a direct relationship to that at all [...] I don't feel that I've seen enough real-world examples to conclusively say that income level or neighborhood that you live in will have an impact on your mental health. I mean, I wish it could be simpler. But I cannot say that I've seen a direct relationship between, you know, the neighborhood that you live in and your mental health.”

Violence and Crime

Hogg’s Hollow is considered an affluent neighbourhood by all my interviewees from that community. Interviewee I said: "I think simply because the price of homes, you know, I think that at this stage, I don't think you can buy a house in this neighborhood for less than \$3,000,000. So that in and of itself, will dictate the type of people who can afford to live in this neighborhood. So, by definition, it would have to be affluent."

Even though these participants live in a beautiful high-end area with luxury they are not exempt from crime and safety issues. All my participants said Hogg’s Hollow is an overall “a very safe neighbourhood to raise children, but their neighbourhood lacks sidewalks” which creates anxiety and a safety issues for young mothers when it comes to protecting their children. During the week there is a lot of trucks, service vehicles and cars driving through the neighbourhood making the roads congested and very unsafe for young kids playing or riding their bikes. Interviewee F said: “Yeah, so if you have smaller kids or kids that are on their bike and uh, you know, even

with just general traffic, we have areas that get very congested due to a landscape or trucks and service vehicles and construction trucks and it can be very, very frustrating.”

Interviewee J even mentioned that sometimes there are residents in the neighbourhood that drives their luxury cars at a very high speed and fail to follow the speed limit and that type of behaviour from the community members make her angry and frustrated because she does not want any of her kids to get run over or be in an accident.

While speaking with my interviewees I noticed that having no sidewalk in the neighborhood was concerning and made my participants feel insecure, angry and frustrated. So, I asked my interviewees that if having sidewalks in the neighborhood is so important to all of you, “have you taken an initiative to bring this to the neighborhood?” Interviewee F responded: “Well, unfortunately that ship has sailed. I guess there was a vote amongst the active members in the York Mills Valley Association (YMVA) to put in sidewalks or not, because we have had several roads repaved as we had some sewer work done and they voted to have no sidewalk to maintain the country feel of the neighborhood. Also, it would have required removal of trees because our roads are not wide enough to sustain sidewalks without removing a few trees here and there. But in my opinion, the benefit of sidewalks outweighs the removal of trees.”

Another concern that three of my interviewees (F, I and J) shared was “there is a fair share of break-ins happening in the neighbourhood that is making the residents worrisome.” Interviewee I said: “Unfortunately, we are not immune and uh, you know, occasionally there is crime in the neighborhood as well and so all of that gets captured in the newsletter that circulated [...] incidents that are happening in the neighborhood break-ins. So, they have typically in the last year or two, not been incidences of physical harm in the streets, but there have been break-ins and there've been quite a few of them [...] the neighbourhood hired private security however, there has been representative from our police division 32 who have come in and address the community on steps that you can take to try and keep yourself safe.” Interviewee I also shared that even through their neighbourhood is fortunate enough to hire private security companies to look after their properties but sometimes due to “flash storms there are trees that falls on electric cables and properties causing frequent power outage and that can become problematic because it

shuts down the security system in the houses.” Interviewee H said their neighbourhood has a “Crime Watch” where residents who stay home keep an eye on the street to check for any suspicious person or cars roaming around the area. She also mentioned there is a section on “Crime Watch” in the neighbourhood YMVA newsletter that reports recent incidents like stolen cars, break-ins, stealing cash and jewellery and many others that happened in the neighbourhood and warns residents about staying safe. Interviewee H shared that the “Crime Watch” section in the YMVA newsletter informs residents on precautionary measure that can be taken to keep themselves and the properties safe and protected.

Interviewee G, H, I and J mentioned that because of recent break-in incidents that are happening in the neighbourhood they feel worried and anxious and said “there is a sense of comfort and safety from knowing your neighbours.” These participants believed that knowing who lives next to them and maintaining a good relationship with their neighbours gives them a sense of security because if in case they are away on vacation and need their neighbours or vice versa can watch over their property while they are gone.

Interviewee F and I said “There is relatively low crime rate in Hogg’s Hollow but there are incidents of break in.” Interviewee I was quoted saying “There are people in their house, walking their dogs outside, there is a lot of eyes on the road.”

Interviewee J revealed that over the years it has become harder to know your neighbours because there is a lot of absentee foreign buyers in the area that buy properties and don’t live in the neighbourhood.” It's changing a bit over the past few years with the craziness of the real estate market. Some of the older residents that I was friendly with are moving out and there's more foreign buyers moving in and a lot of them are absentee owners, so it's changing the neighborhood of it, but it's still pretty special.”

Interviewee F and I believe “there is a correlation between crime rate in your neighborhood and mental health” because it makes you feel unsafe. Interviewee I said, “it is a fundamental need for human beings to feel safe and if they are not feeling safe, then that doesn't allow them to focus on simple things like taking kids to school, walking through neighborhood, preparing meals,

going shopping, leaving house unattended etc. and eventually becomes very frustrated and worrisome and it could negatively impact one's mental health.”

Neighbourhood Activities

During my recruitment process I was invited to the volunteer appreciation party at Hogg’s Hollow and the neighbourhood appeared to be a very social community. I asked my participants if they think “where people live has an impact on their mental health?” Two interviewees G and I said “Absolutely- both go in hand in hand”. They further elaborated their answer that having a close supportive group nearby in the neighbourhood prevents people from feeling lonely and not wanted. Interviewee I also added that long commuting hours can be a contributing factor as well. She said people who live far away from their workplace invest long hours commuting instead of using that time to good use such as socializing, relaxing, enjoying the nature etc.

Interviewee I was quoted saying: "social isolation is a problem, when you don't have those opportunities that can lead to other issues, I think we're fortunate to live in a neighborhood where the social connection piece is not only available but readily accessible.” Interviewee F and J said “there are lots of social activities about 7-12 social events per year” happening in Hogg’s Hollow. Each interviewee shared that they are involved in organizing and managing various activities that are taking place in the neighbourhood. Four of my interviewees F, H, I and J assisted with The Valley Fair- the biggest annual event held in June. It is an all neighbourhood events ran from noon right up until after dinner. It features a variety of friendly competitive games, crafts, bingo, face painting, bake sale and culminates in an evening dinner with DJ and dancing, although mentioned dancing is really for the kids. Interviewee F, G, H and J also mentioned the neighbourhood arranges other smaller events throughout the year which includes Fall and Spring social, Bridge or Scrabble Group, Book Club/Coffee Morning, Cookie Exchange, Wine Tasting, Women's dinner and two adult dinner parties that rotates through different resident's house, Exchanging Christmas Carols in the winter, Potluck lunches, Mom's/ Ladies dinner group, Soup exchange in the winter, and lastly Halloween and Christmas parties.

Interviewee F and J said they love that there are so many neighbourhood events happening in the community it gives a feeling of “close knit family” and brings the residents together. They try to

attend as many social events, but it is challenging to attend evening events with little kids as they cannot stay home by themselves and needs babysitting and their husband travels a lot.

Interviewee F said “there is always an ongoing group that meets every 4 to 6 weeks to organize events.

When I probed my interviewees for any environment related activities that takes place in the neighbourhood Interviewee F, G, I and J said the “Annual Clean-up Day.” The participants elaborated their answer by sharing that the annual neighbourhood clean-up day is held in April around the same time as Earth day organized by the neighbourhood beautification committee that brings out at least 10 to 15 neighbours that meet in the morning to pick up garbage like plastic bag and bottle, debris from winter, construction waste etc. from immediate neighbourhood streets. Interviewee F said "The main goal is really to clean up the neighborhood. Its secondary goal is to socialize. But yeah, the main goal is to, to help clean up the neighborhood. They intend to bring out different people with different style social gathering. So, you know, maybe there's people that don't attend the evening or the cookie exchanges, they would come out for the neighbourhood beautification activity. "

Interviewee H did not think where people live have an impact on their mental health and replied “No” to my question and supported her answer by saying “well, I think every individual is different in how they relate to their environment. Some may have an impact on them, but the next person with the exact same scenario it doesn't have an impact on them. So, um, you know, in the big picture, I don't think that where you are living is going to make a difference if you took them out of one situation and put them in another, chances are there's still going to have, mental health issues. I think it's more, an individual way of thinking that is impacting what's going on for them." She further added that the neighbourhood is great socially and “people in the neighbourhood are mostly amazing but does tend to have a sense of hierarchy and make decisions for all the residents without openly sharing information” and that can kind of attitude makes are her uncomfortable and frustrated. Later the same concern was shared by Interviewee J as well. Interviewee H also mentioned that “some groups on occasion will exclude other people” this results in isolation for certain residents and that is mentally disturbing.

Interviewee J responded to my question by saying “think so” because she agreed there could be a relationship between the two but was a bit hesitant about it. She supported her answer by saying “being able to go outside for a walk, working in your garden, being in the outdoor areas and nature help minimize anxiety, depression.” And added that “anyone can experience mental health challenges regardless for where they live it’s just maybe triggered differently.”

Interviewee F did not comment on this question as she was “not sure” about it but along with Interviewee G and J believes there is a “connection between social interactions and mental health” because it allows people to bond and relate with other people and feel less isolated as we face everyday frustrations.

Interviewee I said, “I think the social connection piece is critical to mental health and I think that ultimately all of those events foster social connection.”

Interviewee F said: “I think that helps us feel more comfortable as human beings when we can look at ourselves and say it's okay that I'm feeling upset or it's okay that I'm not happy about something that happened because you will have the opportunity to share that experience with other people and find out that they too will have a similar reaction. I think that that sense of shared experience is very important for mental health. So, you can't have a shared experience unless you have a social interaction. So social interaction is definitely important.”

Interviewee F, I and J concluded that Hogg’s Hollow is a friendly, socially active and welcoming neighbourhood that forms social connections with neighbours with ease.

Noise and Commute

According to Interviewee I many of the houses in Hogg’s Hollow were originally built in 1950. She stated “our home is 47 years old, so this would be an older home in the neighborhood, our home was built in the early seventies. Most people though don't want to live in the older homes. Most people want brand new homes and so a lot of homes are being sold, torn down and building much larger homes on the existing lot.” She believes that could be an issue for the neighborhood

because “it is changing the face of the neighborhood” and there is an increase in construction work in the community.

Interviewee F mentioned there is “new houses being built, renovated and construction work ongoing every single year.” Interviewee H and J also shared the same concern and said there is “lots of construction and maintenance people coming into the neighbourhood.” Interviewee H was quoted saying “due to construction work there is water bottles and garbage that makes the roads dirty.”

Interviewee I said there is noise produced from the construction work and can be problematic for people living next to construction projects. She stated “Um, it hasn't been an issue for me personally, to date because I haven't had immediate neighbors go through this construction process. I have had neighbors further up the street who have battled projects next to them and I've supported those longstanding neighbors. But we haven't had any immediate construction that has affected us to this point, but of course it's an issue for the neighborhood and at some point, it will become an issue for us as well.” She also said, “the noise level is perhaps taking on more permanence because of the types of homes that people want.”

Interviewee F and H said the neighbourhood is “quiet in general” but during summer, residents with swimming pool normally tend to throw outdoor pool party and that can create a lot of noise. Both interviewees mentioned even though the noise level is “tolerable” it can become an issue in the future.

Interviewee F and I believe that “noise level has an impact on mental health of residents living in a noisy environment” because “it can be disruptive and won't allow to focus and concentrate and that can make a person frustrated.” Interviewee F said, “I would see noise being very negative for mental health or relationship between noise level and mental health.” Interviewee I was quoted saying “in the case of this neighborhood, we've talked about noise level, we've talked about some crime and it does absolutely affect the wellbeing of residents and feelings of safety is an important one.” Even Interviewee J agreed with them and said, “noise can definitely impact your mental health and peace.”

To interviewee G she felt the neighbourhood had “less traffic, quiet and has lots of nature” and she did not see any “negative side” to Hogg’s Hollow.

Participants F mentioned there is “easy accessibility to TTC subway station and the 401” which makes it easier for her husband to commute to work. But she expressed that because the neighbourhood is isolated from the main streets it is not walkable distance to schools, grocery stores, library, community centre etc. and that upsets her a “little bit” because she has to take the car everywhere and cannot enjoy a “good walk” like she used to in her previous neighbourhood. Participant F also mentioned the same thing and said “from the perspective of like walking somewhere it's a very minor issue [...] in terms of whenever we went to go to an activity we have to most of the time hop into the car to get to where it was we were going [...] it takes like 20 to 30 minutes to walk just to get out of the neighborhood and then we're at Yonge Street.

CHAPTER FIVE: DISCUSSION

How does my study “speak back” to the literature review?

Supportive to Literature Review

Neighbourhood Environment and Mental Health

The primary purpose of my research study was to investigate the perceived relationship between neighbourhood environment and mental health among residents of two contrasting neighborhoods. My participants from both neighbourhoods expressed that mental health is "an extremely important issue" and "the frustrating part is you cannot see it like your health problems." I had an interviewee from Alexandra Park who disappointedly expressed that when it comes to mental health, you don't receive attention unless you label it.

Some of my interviewees have family members coping with mental health issues like stress, anxiety and depression. They believed that where these relatives lived have an impact on their psychological well-being, for example having long hours of commute to work can cut down time to socialize with family and friends and this can negatively affect their mental health. I also had some participants who didn't believe that where people live can have an impact on psychological health.

I believe that the neighbourhood we live in can have a significant influence on our mental health so, I asked my participants “Do you think there is a relationship between your neighbourhood environment and mental health?” I received mixed responses from all my participants. Some participants said, "yes there is a connection" and reflected that the environment around your residence definitely has an impact on your psychological well-being, thus supporting my hypothesis. Two interviewees from Hogg's Hollow said "No, I do not see a connection" because “mental health can affect anyone regardless of their class or where they live.” I also had one interviewee from Hogg's Hollow who couldn't decide and said, "cannot definitely say yes or no" because "there are people in very affluent neighbourhoods not happy and have mental health issues, and there are people who do not have the same level of income as affluent individuals or don't have a lifestyle at the same level but still have a very positive outlook on life." This kind of comment coming from an educated individual amazed me because certainly, mental health challenges do affect everyone along the income spectrum but data from Statistics Canada show that in Canada low-income households are significantly associated with a higher risk of

becoming distressed because it preceded the development of high psychological stressors (Canada, 2015). Lower-income men have 1.58 times the likelihood of becoming distressed compared to higher income men (Canada, 2015). Additionally, lower-income women are illustrated at a 25% greater risk of becoming distressed than higher-income women (Canada, 2015). Hence, men and women in the low-income cohort battling poverty have a higher rate of depression and anxiety than those who are living in wealthy neighbourhoods. Affluent residents have many ways of buffering through privilege and are less likely to be exposed to many of the triggers such as inadequate housing, security risk, social isolation, unemployment and poor education that might lead to depression. Affluent individuals are much more likely to be supported through depression and anxiety, through access to not just services but all kinds of social and emotional support that minimize the risk associated with mental health challenges. For them to not understand and appreciate that puts poor communities at further risk.

Neighbourhood Characteristics and Parenting

All the women I interviewed from Alexandra Park and Hogg's Hollow shared the same view as MacDonnell, Robinson, Mikadze, McDonough, and Meisner (2011), that when raising young children, it is important to have neighbourhood access to playgrounds, parks with trees, open green space and walkable environment because it allows children to interact, enjoy the nature and have fun. Not being able to provide a child with these neighbourhood physical characteristics creates feelings of disappointment, distress and anxiety among parents.

My participants from Alexandra Park shared that in their neighbourhood "drunk and homeless people" are commonly seen lying on the streets, and this scares their children. Two women, I interviewed from Alexandra Park who originally immigrated from the Philippines and Jamaica both shared that "back home" they did not have playgrounds for kids to play and the neighbourhood had high violence and crime rate. So, coming to Canada and living in this neighbourhood have "given their children a childhood" because they can bring their children to this park and playground, where they can happily play and interact with other children. My participant who immigrated from Jamaica (Interviewee D) shared that her children used to be shy before but thanks to the neighbourhood park and playground they are able to communicate with other children which made them more social and outgoing now. Interviewee D shared that seeing

the joy in her children faces gives a sense of accomplishment and makes her happy. She feels satisfied as a parent because she is able to make her children feel safe and secure even though she knows they don't live in the best neighbourhood.

Participants from Alexandra Park also expressed that they are stressed and financially struggling to put their children in community activities because it is very expensive, and it is hard to find spots in the City of Toronto programs because they get filled very quickly. This distresses the parents because they feel their children are falling behind compared to other kids, and not being able to participate in activities is affecting their confidence and self-esteem level. This supports United Way's report on there is a low percentage of children from the low-income family participating in after-school programs due to financial barriers because all of my participants from Hogg's Hollow (an affluent neighbourhood) said their children are involved in after-school programs, multiple extracurricular activities, and take private lessons in swimming, skating, piano, karate, cross-country skiing and many others.

Women I interviewed from Hogg's Hollow said "not having a sidewalk in the neighbourhood is concerning and frustrating" as they have little children who like to play and ride their bikes outside in the summer. They are worried about their children's safety because there are lots of trucks and cars that drive through the neighbourhood. Sometimes residents in the neighbourhood drive their expensive cars fast and don't maintain the speed limit, and this creates anxiety and stress among parents. This supports research work from scholars like Galster and Hassan that whether you live in a poor or affluent neighbourhood, parents will always worry about their children's safety and think about their well-being. But what I did not understand is if all these mothers from Hogg's Hollow are concerned about their children's safety then why is it more important to maintain a "country feeling" over their children's safety?

My interviewees from Hogg's Hollow believes that upper-class children are just as vulnerable to their psychological well-being as children from an impoverished background which supported Luther and Latendresse study. Interviewees shared that they have noticed children in their neighbourhood suffer from substance use, gaming addiction, anxiety and depression. Interviewee G said, "education is very important and the key to children's future." She mentions that parents

in this neighbourhood hold very high-profile jobs and tend to have very high expectations from their children and that puts in a lot of pressure for the kids, and not being able to meet their parent's expectations results in depression and anxiety because they consider themselves as failures.

Social Connection and Mental Health

All the women I interviewed at Alexandra Park and Hogg's Hollow said: "social interaction is important for mental well-being." Interviewee I from Hogg's Hollow said, "social isolation is a problem when you don't have those opportunities that can lead to other issues" and she stated that it is an excellent thing that her neighbourhood is very socially active and "social connection piece is not only available but readily accessible." My participants from Hogg's Hollow shared that they organize about 7-12 neighbourhood events every year and that helps build a close-knit community. The neighbourhood activities allow residents to communicate with each other and welcomes new neighbors into the community. The interviewees from Hogg's Hollow believed that all these neighbourhood social events prevent community members from feeling isolated and creates a sense of belonging which boosts their self-confidence.

In Alexandra Park my participants also believed social ties and forming relationships is important to the psychological well-being and prevents from feeling lonely and depressed. My interviewees from this neighbourhood said the demographics of their neighbourhood is mostly Asians and language can be a barrier for most of them as English is not their primary language and they do not speak it fluently. The neighbourhood parks like the Alexandra Park creates opportunities for these individuals to come outside and meet people of the same ethnic background and make friends. The interviewees believed that as most of them are immigrants and coming to a new country can be hard to adjust and face cultural shock, making new friends with whom they can communicate can help build a sense of security and make them feel they are part of a community. Interviewees A and D also said "strong support from family and friends" can assist people to overcome their mental distress and have better psychological well-being.

My participants from both neighbourhoods Alexandra Park and Hogg's Hollow, strongly believed that there is a correlation between social connection and positive mental health which

confirms Kawachi and Berkman's argument on "social ties play a beneficial role in maintaining psychological well-being" (Kawachi & Berkman, 2001, p. 458). Through my interviewee's responses, I can view Cohen and Will's main effect model because all of them are involved with the community and participate in social events that create a sense of purpose, security and recognition of self-worth in them. However, my results were not strong enough to support the stress-buffering model as my study's primary focus was on mental health rather than the physical health effects from stressful events.

Low-Income and Housing

The interviewees from Alexandra Park mentioned there are lots of high rise co-op government buildings in the neighbourhood. Two of my interviewees live in the co-op government building, and they complained that tenants in government buildings face multiple issues like pest infestation, break-ins, dirty lobby, gun shooting and drug dealing. The management does not address these problems regularly or on time, and this frustrates her. Interviewee D even shared that there are times when sometimes blood can be noticed on the building's carpets, and the superintendence does not take the initiative to clean it as soon as possible. This kind of incident especially bothers her as she has young children who would question her which puts her in a very uncomfortable situation as she does not want her kids to feel unsafe in where they live. All these incidents shared by my interviewees confirms United Way's report on Toronto 's low-income population is getting more concentrated in crowded high-rise buildings and many of these buildings are in poor condition. It also supports Downey and Willigen's (2005) argument on low-income residents usually end up living in an environmentally dangerous neighbourhood which is a significant chronic stressor due to their socioeconomic status and financial hardship.

According to my participants from Alexandra Park, there is less funding for mental health care, and fewer resources are available for low-income individuals fighting with severe mental illness. Therefore, a lot of volatile and addictive homeless people are noticed in their neighbourhood lying on the ground. This distresses the residents because some are frightened of them, some are frustrated with them begging in front of their kids which puts parents in an uncomfortable situation due to their tough financial situation, and some just feel helpless and powerless because they cannot do anything to help these people. One participant from the neighbourhood appeared

quite angry at the government and said: "the government always makes big promises before the election and then forgets all about it after they have gained power." Whereas in Hogg's Hollow I did not notice any homeless people wondering or lying on the ground. None of my participant from Hogg's Hollow made any complaints about encountering drunk or mentally unstable people in their neighbourhood. This connects with Downey and Willigen's (2005) argument that low-income neighbourhoods does have limited access to cope stress, depression and anxiety, and supports Manley & Ham that income determines the type of neighbourhood people live in. But makes me think whether it is the current expensive market and increasing rent that is pushing the low-income groups into poor neighbourhoods. According to the Canadian Mental Health Association, a recommended guideline suggests that no more than 30 percent of household's income should be allocated for housing yet in 2001 census data indicated that 42.2 percent of Ontario renters are spending more than 30 percent (Association C. M., 2007). I believe this could be the reason homeless people are noticed in Alexandra Park and not in Hogg's Hollow because Hogg's Hollow has an average income of \$331,626 with a very successful real estate market whereas Alexandra Park has an average income of \$29, 523 (Monsebraaten, 2017). The low-income results in the inability to access affordable housing increasing a person's risk of homelessness which in turn increases a person's risk of developing mental illness. Therefore, I believe providing more affordable housing can be a part of the solution to alleviate poverty among the poorest Toronto residents.

Green Space and Mental Health

All my participants from Alexandra Park and Hogg's Hollow said there is a "connection between nature and mental health." They believe having green space in the neighbourhood allows people to come outside and socialize which evidently lessen mental distress, anxiety and depression. One of my participant (Interviewee F) from Hogg's Hollow said: "nature lets us relax and feel comfortable and takes us away from all the societal criticism and judgement." Interviewees from Hogg's Hollow appeared very happy and proud of their natural "country feel like" neighbourhood. They expressed having green space like parks, golf course, bike trails, playgrounds allow them and their children to go outside and enjoy some quality time doing physical activities such as running, jogging, walking and riding bikes in nature which helps relieve their worries or stress.

My participant from Alexandra Park who organizes weekly Tai-Chi classes in the park for the community said “Tai chi helps a person's mental health” because it makes people leave their daily stress and anxiety behind and just focus on themselves for the time being and relax their mind. She believed that spending time in nature nurtures one's mind and encourages a positive mindset. This confirms Barton and Rogerson's (2017) theory of "green exercise" resulting in a positive relationship between neighbourhood green space and mental well-being.

Responses from my participants from both neighbourhoods refute Ruijsbroek, and his colleagues study and support Henderson-Wilson and Weerasuriya recommendation to include green spaces in healthcare plans because it relieves stress and provides benefits to psychological well-being.

Violence and Crime

Gun shooting, stabbing and homicide appeared to be a more prominent problem in Alexandra Park, whereas break-ins were a common concern in Hogg's Hollow. The women I interviewed from Alexander Park neighbourhood shared that even though this community is better than their previous neighbourhood, they still feel "scared" and "unsafe" in this neighbourhood because of the crime, gun shooting and mentally ill people in the area. Also, seeing police doing rounds in their buildings and roads constantly reminds them of the "high crime rate" in the community and the dangerous neighbourhood they live in. These alarming situations result in stress and the feeling of powerlessness among interviewees, as they have to live in a disadvantageous neighbourhood due to their financial limitations and this supports literature works from scholars like Ross, Cutrona, Wallace, Wesner, Curry, Latkin and Davey-Rothwell.

In Hogg's Hollow residents are very worried about break-ins and feel "unsafe" because of the ongoing break-in incidents. The neighbourhood's YMVA ratepayers group takes care of this problem by hiring extra private security and also works with Toronto police to make sure residents safety is prioritized. This supports research work from scholars like Manley and Ham that income determines the type of neighbourhood people live in. Hogg's Hollow being affluent neighbourhood residents can afford to hire private security for their safety and attend to this issue quickly.

All the women I interviewed in Alexandra Park and Hogg's Hollow showed concern for their children's safety and well-being. This supported Galster (2014) theory that a clear link exists between neighbourhood and child outcomes, through the effect of parenting. Galster believed that parents want to safeguard their kid's well-being and not being able to provide a safe environment frustrates them. I noticed this more in my participants from the Alexandra Park neighbourhood as they shared there is a lot of gun violence, crime and drug dealing happening in the neighbourhood and they don't want to expose their children to crime and violence at such a young age. Not being able to provide them with a safe environment to play and reside in makes them think they have failed as parents and this results in hopelessness and depression.

Interviewees from both neighbourhoods believe there is a relationship between crime rate and psychological well-being. Interviewee F said, "I suggest that there would be a correlation between the crime rate and mental health because crime in your neighbourhood makes you feel unsafe. It's a fundamental need for human beings to feel safe and if you are not feeling safe, then that doesn't allow you to focus on some of the other things that you need to do every day [...] if there was a high crime rate in your neighborhood, it would be very worrisome and frustrating as an individual and I could see that impacting your mental health negatively."

Everyone from both neighbourhoods discusses the theme of violence and crime, but the severity of the crime, the risk to personal safety and the anxiety that is provoked are very different. Hogg's Hollow residents hired a private company to patrol their neighbourhood and to toughen the security for the break-in incidents that are happening where no one is reportedly getting hurt whereas people in Alexandra Park are daily facing the pressure and fear of getting involved in or witnessing gunshot and homicide in their neighbourhood. What I noticed is happening in these different contexts is how the experience and embodiment of lack of safety are very different.

Noise and Commute

The noise level was a common concern in both neighbourhoods. Alexandra Park neighbourhood is surrounded by traffic and crowded roads, hospitals, China Town and Kensington Market which makes the noise level high in this neighbourhood. Hogg's Hollow, on the other hand, is an

isolated neighbourhood away from the traffic and industrial activities. Most of the noise in this area is caused by construction work. Participants from both neighbourhoods said noise distracts people and does not allow to concentrate on their daily activities which can frustrate someone. Therefore, having a quiet neighbourhood will let people focus and good for mental health. YMVA ratepayers group in Hogg's Hollow makes sure that construction work does not create problems for the neighboring residents. Interviewee F said, "I would see noise being very negative for mental health or relationship between noise level and mental health."

Commuting was another common problem that surfaced in both neighbourhoods. Interviewees from Alexandra Park said that commuting to work becomes challenging when TTC transit is diverted because of construction work and commuters in the neighbourhood are not informed about it. This is a psychological stressor as residents worry about going to work on time, dropping off their children at school and daycare. Research shows that commuting has a significant psychological cost because of its unpredictability and sense of loss of control (Wei, 2015). A 2004 study illustrates that nearly a thousand employed women found commuting the least satisfying activity because they viewed it to be associated with low frustration tolerance, impatience and a high level of anxiety and hostility (Wei, 2015). Hogg's Hollow residents complained about not having walkable access to grocery stores and having to take their car if they want to make a trip to the supermarket when they have a Loblaws, TTC subways station and TTC bus stop eight minutes walkable distance from their neighbourhood and 401 highway close by. These common themes that emerged during my interviews support Hassen's research work but make me wonder if these wealthy residents are deliberately ignoring multiple equity issues.

Neighbourhood and Environmental Injustice

Surprisingly, interviewees from Alexandra Park did not have any environmental discrimination complaints. Instead, interviewees responses were relatively positive, and one interviewee (A) even said "I think the government is very fair when it comes to planning for everyone whether it's this community or rich. They're giving everybody like fair treatment." The interviewees in Alexandra Park currently do not report experiencing any environmental discrimination in their neighbourhood but believe that most industrial activities are located near working class neighbourhoods because residents in those neighbourhoods will not complain or voice their

opinion even though they might complain to each other. This seems to support literature work from authors like Mohai, Bryant, Bullard and Hofrichter.

New Findings

Affluent Parenting

Luther and Latendresse argued that upper-class parents often leave their children home alone to grow their self-sufficiency. But surprisingly, three of my participants from Hogg's Hollow said they are "currently not working" because they are focusing on raising their children. They also mentioned that they do not feel safe leaving their children unattended and rarely leave them by themselves. Luther and Latendresse also believed that high profile career-oriented parents do not have enough time for their children, which creates distance in their relationship. I did not notice this trend in the working mothers in Hogg's Hollow; all of them stated that both parents always make sure to spend quality time with their children and give them the "family time" that they need.

Socio-Economic Status

The interviewees from Alexandra Park shared that affluent people can purchase more luxury, solitude and peace for themselves which makes them less vulnerable to mental health difficulties. But participants from Hogg's Hollow seemed to think differently. They shared that mental health can affect anyone equally whether they are rich or poor, having money can allow easier access to resources and service for mental health, but it does not guarantee a better coping mechanism for mental illness. Interviewee G said, "I think look at all these individuals like Kate Spade, Robin Williams, they were all struggling with mental illness. I'm sure they didn't have any issues with their finances or the neighbourhood that they were living here. So, it doesn't matter. And I'm sure they had people on it and working with them. Psychiatrists and doctors and you know, he's just still can't cope." My participants from Hogg's Hollow believed having financial support does not exempt one from mental illness or gives them an advantage in battling it. As I discussed above, I understand affluent residents have stress in their life too, but it is at a different level than the stress faced by poor and low-income neighbourhood residents. I feel residents from Hogg's Hollow are actively ignoring equity issues.

Alexandra Park residents experience the on-going daily assault on their system due to their highly unsafe neighbourhood environment which results in stress and anxiety, leading to negatively impacting their mental health. What I discovered is that there is a connection between where these participants live and how they feel, but unfortunately the affluent residents from Hogg's Hollow do not recognize or appreciate members in inequity. If they don't see or understand this inequity, it will be very hard to bring change in this field. Therefore, it is significant to draw attention to the ways that these very different experiences such as violence and crime, neighbourhood and mental health, parenting, low-income and housing, green space and social interactions can produce various kinds of health outcomes. This will be the first step in moving towards a place where we can think about how to reasonably re-plan our city to promote mental health for everyone and not just for the wealthy community.

Social Connection and Mental Health

Although women from both neighbourhoods agreed social connection helps promote positive psychological well-being, it seemed participants from Alexandra Park had very few social gathering or community activities happening in the neighbourhood. Interviewee A said, "community is like a family even if they don't know each other." This statement gave me a sense that residents in this neighbourhood do not associate much with each other. The other responses I received from Alexandra Park showed residents are happy with maintaining very limited interactions with others in the neighbourhood and do not think it is essential to know their neighbours. A lot of them are also content with just mingling with their ethnic group and not open to making friends with people of other ethnic backgrounds. Ironically, interviewee C from this neighbourhood said: "affluent neighbourhoods won't have the same level of friendliness or comfort as the residents of a poor or working-class neighbourhood like Alexandra Park." This was quite the opposite as participants from Hogg's Hollow all said their neighbourhood is "very socially active," they like to get to know each other and have various annual, monthly and weekly social events that help them form a great bond as a community. Interviewee I said: "I think the social connection piece is critical to mental health and I think that ultimately all of those events foster social connection." I noticed a stronger neighbourhood friendship and connection among Hogg's Hollow residents than Alexandra Park residents.

CHAPTER SIX: CONCLUSION

Strengths

Most of the literature work on neighbourhoods and mental health often focus on poor and low-income neighbourhoods with the intent to enhance their psychological well-being by improving their community. My research study concentrates not only on a disadvantageous neighbourhood but also involves an affluent neighborhood. This gave me an in-depth diverse perspective on the relationship between neighbourhood environment and mental health. This also opened the opportunity to do interesting comparative work (see Appendix A for average household income). Studying two distinct neighbourhoods allowed me to investigate how impoverished and low-income communities are being affected psychologically by their neighborhood's environment.

The study also enabled me to challenge certain stereotypic assumptions about affluent neighbourhoods. For example, people usually think "wealthy individuals are less mentally distressed because they have the money to buy luxury and peace," but my interviewees from Hogg's Hollow strongly opposed this and said, "mental health doesn't seem to have a boundary in terms of where you live." Research on neighbourhoods and mental health is not a new phenomenon, but my research did contribute some unique and supplementary findings, bringing in a new perspective to the growing existing diverse body of work in the field.

Limitations

Although my study exhibits a number of strengths, there were also a number of limitations and setbacks.

Methods Influenced Responses

Some of my participants from both neighbourhoods were generous with the amount of time they could give me, but that was not the case for all of them. A few participants from Alexandra Park appeared to have rushed through the interview and provided shorter answers because they were busy and distracted. I had two participants from this neighbourhood who had very limited time; this made the interview rushed and very tightly structured. There was no room for sub-questions

or flexibility to go beyond my eight pre-determined questions. All my participants from Alexandra Park also wanted to do the interview on the same day in the park, while they were watching their kids. I believe this also deviated participants from giving their full attention to the interview questions. Whereas residents from Hogg's Hollow preferred to set-up a separate time for us to meet and appeared very eager to participate in an hour interview. Therefore, the locations and circumstances influenced responses from my participants, and I ended up collecting richer data from Hogg's Hollow than Alexandra Park neighbourhood.

Gender-Selective

Research studies show that mental health is not gender neutral (Pilgrim, Rogers, & Pescosolido, 2011). According to Pilgrim and colleagues, there is incontrovertible evidence that women are more likely to be diagnosed with mood and anxiety disorder than men; men are more likely to be diagnosed with drug or alcohol abuse and antisocial personality disorder than women (Pilgrim, Rogers, & Pescosolido, 2011). My research study was open to both genders, but I was only able to recruit female participants. In Alexandra Park, males that I approached with my research study simply refused to partake and said that they "do not participate in community activities" or "do not have the time." In Hogg's Hollow, I was introduced to two potential male participants, but they appeared to be very busy and travelling too much to find time for an hour interview. I believe it would have been more interesting if I had male participants as well, because it would have given me a variety of responses that would allow me to compare and contrast on what both genders have to say to my research questionnaires.

Sample Size

This study is a small-scale study with a sample size of only ten participants, five from each neighborhood. This sample size is too small to speak for the entire Alexandra Park and Hogg's Hollow neighbourhood. Also, using two neighbourhoods as examples does not explain relationships in all the neighbourhoods in Toronto. I would suggest that conducting this study with a larger sample size and a few other neighbourhoods could have generated more supportive results.

Saturation

I did not achieve saturation in my study because the responses I received from my participants were diverse and did not maintain consistency. Regardless of these limitations, the findings from my research study can surely be a good starting place for future research on improving mental health through neighbourhood-level interventions.

Conclusion

For my research paper, I was fortunate enough to interact with people from two very different neighbourhoods Alexandra Park and Hogg's Hollow. Throughout my research, I encountered and interviewed people with a different ethnic background, viewpoints and socioeconomic status. There were such a diversity of responses and respondents that a number of common themes like Neighbourhood Characteristics, Social Connection, Green Space, Crime and Violence, Noise and Commute and others emerged that influenced neighbourhood environment and mental health. At the beginning of the paper, I hypothesized there is a correlation between neighbourhood characteristics and mental health that is mediated by daily stress and vulnerability to adverse events. So, positive neighbourhood characteristics would be associated with positive mental health and negative neighbourhood characteristics will stimulate a decrease in mental health. My interviewees gave me a strong variation of data which resulted in supporting my hypothesis. Not all of my participants believed there is a relationship between neighbourhood environment and mental health. All, however, agreed that positive neighbourhood characteristics like social connection, green space, playgrounds, parks, and walkable roads can promote positive mental health and therefore believe there is a definite connection between social interaction and psychological health. My participant also thought that negative neighbourhood characteristics like violence, crime, less green space and noise can act as a psychological stressor and result in negative mental well-being. Therefore, the interviewees believed there is a negative correlation between violence, crime and mental health. This study investigated people's own perception about the link between neighbourhood environment and mental health. So, one challenge is that we need to raise consciousness about inequity in the city. In my study I found that people in Alexandra Park felt glad for what they had where as people in Hogg's Hollow had limited understanding of what people in low-income neighbourhoods were going through. Living in

these diluted equities and evidence from other studies show factors such as violence, crime, noise, commute, social interactions, and green space, neighborhood characteristics, low-income and housing have varying impacts on underdeveloped neighborhoods. If Canada does not begin to invest more aggressively to improve mental health outcomes and generate cost savings it will cost the economy at least \$50 billion per year (Canada M. H., 2016).

Recommendations

A growing body of diverse literature work illustrates that psychological factors such as how we identify with our neighbourhood or sense of security and satisfaction; social factors like high unemployment rates, social disorder, taking action to improve neighbourhoods; and neighbourhood characteristics such as walkability, access to resources, green space and community support, acting independently or interacting with individual-level factors, can have a powerful influence on our health.

Mental health initiatives can take place at the neighbourhood level and can have an advantage over interventions that focus on individuals, like one of my interviewee said, "It's not individual alone that can improve but the community that can change mental health problems." Therefore, I would recommend Toronto's municipal planning department to pilot a neighbourhood-level and mental health intervention program designed to improve the psychological well-being of all residents of in low-income neighbourhood. For example, I would incorporate more neighbourhood-level social activities that would engage both female and male residents to socialize more in low-income neighbourhoods that would prevent the feeling of isolation and force people to go outside and mix with people of different ethnicity. In this proposed program I would also include improving city planning to promote more physical activities among residents in nature termed "green exercise" by some scholars. Lastly, I would also suggest neighbourhood redevelopment in low-income neighbourhoods to bring improvements to buildings, recreational services for both children and adults, build more parks for green space to improve the resident's mental health and assist individuals who may be in need of services but for various reasons do not seek them.

Implications for Future Research

As previously mentioned two of the limitations of my research study was that it is a small-scale study and the absence of the male participant probed for new research questions that have implications for future research. I would encourage to conduct this research study with both male and female participants with a larger sample group from more neighbourhoods to receive a more supportive and variation of data.

This research interviewed only women from two neighbourhoods, Alexandra Park (working class) and Hogg's Hollow (wealthy) that illustrated a notable comparative difference in their social ties through their involvement in neighbourhood activities and interactions with neighbors. Literature work suggests that social connection to mental health can vary by gender and since this research study only consists of women this could be further explored in-depth through more interviews with men from both neighbourhoods or additional methods.

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APPENDICIES

Appendix A – Interview Locations



Figure 12: Location A-Image of Alexandra Park children's playground

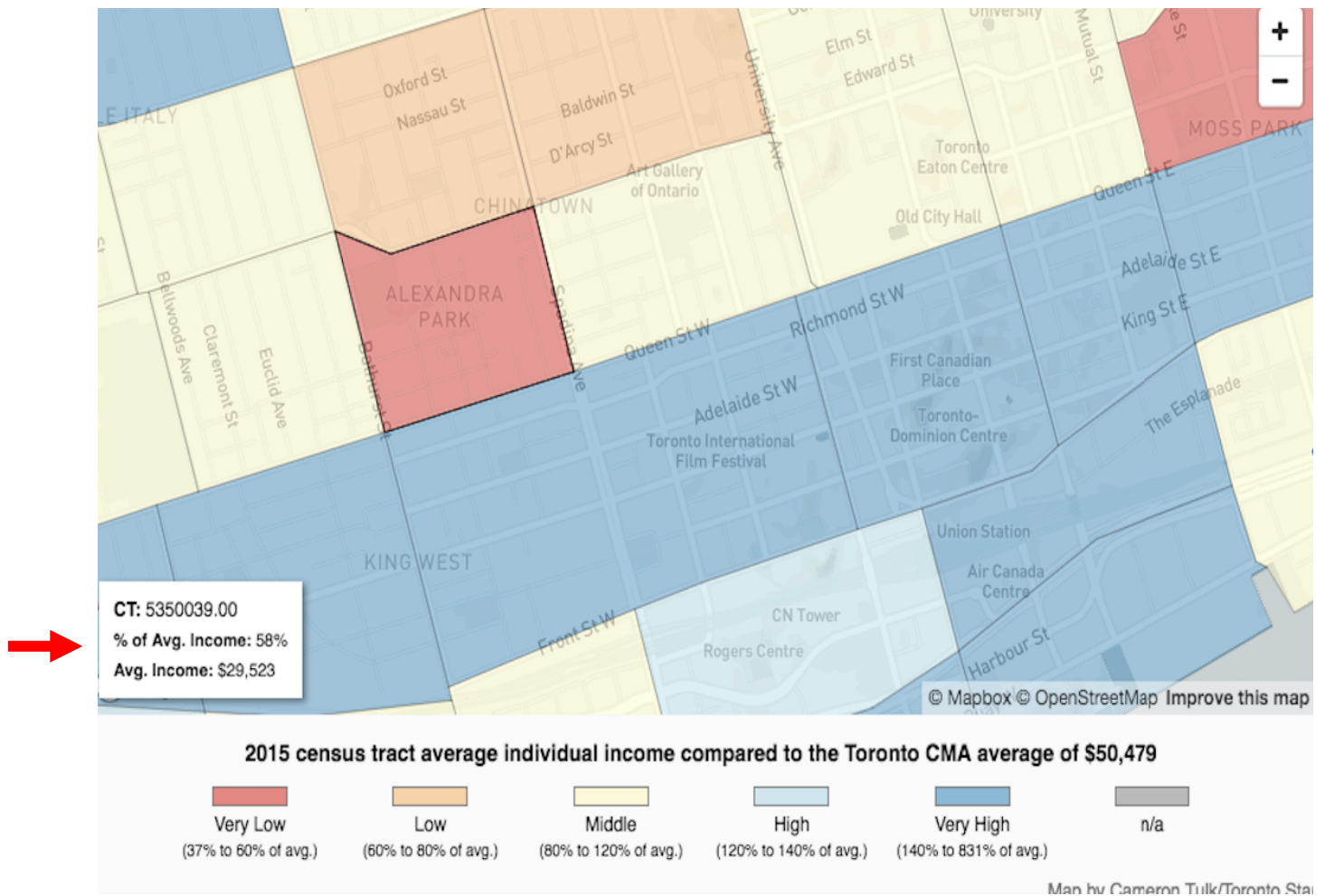


Figure 13: Location A – Alexandra Park’s average individual income in 2015 (Monsebraaten, 2017)



Figure 14: Location B - Hogg's Hollow Neighbourhood Map (Monsebraaten, 2017)

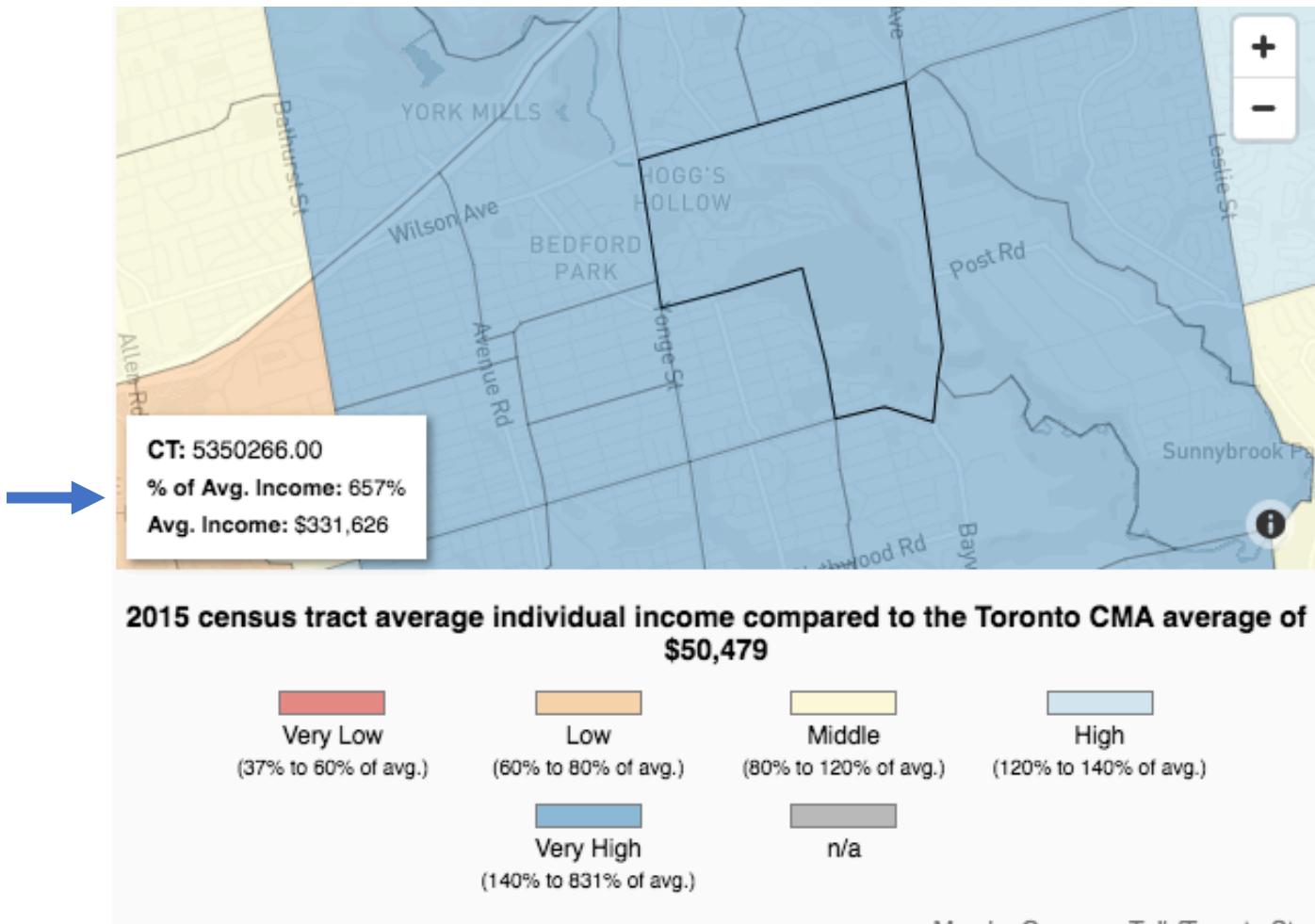


Figure 15: Location B – Hogg's Hollow's average individual income in 2015 (Monsebraaten, 2017)

Appendix B - Data Tables

Alexandra Park (Site 1)				Hogg's Hollow (Site 2)			
Date	Interviewee Code	Description	Interview Method	Date	Interviewee Code	Description	Interview Method
16/06/2018	A	Recruited through the community center.	In-person and interviewed at the play ground	20/06/2018	F	Saw my flier in the neighbourhood and emailed me.	**Telephone
16/06/2018	B	Recruited from Alexandra Park	In-person and interviewed at Alexandra Park	27/06/2018	G	Recruited through the York Mills Valley Association (YMVA) volunteer appreciation party.	In-person and interviewed at Star Bucks
16/06/2018	C	Recruited from Alexandra Park	**In-person interview at Alexandra Park but did not give me consent to record her	27/06/2018	H	Recruited through YMVA volunteer coordinator.	**Telephone
17/06/2018	D	Recruited from Alexandra Park	In-person and interviewed at Alexandra Park	29/06/2018	I	Recruited through YMVA volunteer coordinator	In-person and interviewed at the participant's home
17/06/2018	E	Recruited from Alexandra Park	In-person and interviewed at Alexandra Park	29/06/2018	J	Recruited through YMVA volunteer coordinator	In-person and interviewed at Star Bucks

Table 1: Interview Summary Chart for Alexandra Park & Hogg's Hollow

Interviewee	Sex	Ethnicity	Years in the neighbourhood	No. of children	Employment Status	Education Completed	Language Spoken	Neighbourhood Activities	Poor, Working or Affluent neighbourhood
Alexandra Park									
Interview A	F	Phiippino	10	1	Yes	College	Tagalog, English	<ul style="list-style-type: none"> • Group clean up • Gardening program • Volunteers at the community centre 	Working class
Interview B	F	Chinese	36	3	Yes	Grade 12	Chinese, English	<ul style="list-style-type: none"> • Pedestrian Sunday 	Working class
Interview C *Did not consent to audio recording	F	Caucasian	20	1	No	College	English	<ul style="list-style-type: none"> • Community activities organized by the library 	Working class
Interview D	F	Jamaican	8	2	Yes	Nursing degree	English	<ul style="list-style-type: none"> • Community Volunteer at the YMCA, fitness instructor • Coach community soccer team 	Middle class
Interview E	F	Caucasian	5	1	Yes	Grade 12	English	<ul style="list-style-type: none"> • Neighbourhood Tai Chi group organizer 	Gentrifying
Hogg's Hollow									
Interview F	F	Caucasian	9	2	Yes	Masters	English	<ul style="list-style-type: none"> • The Valley Fair • Wine Tasting • Cookie exchange • The Valley Clean-up day 	Affluent
Interview G	F	Caucasian	4	4	Yes	Masters	English	<ul style="list-style-type: none"> • The Valley Fair • The Valley Clean-up day • Organize community parties 	Affluent
Interview H	F	Caucasian	12	3	No	Bachelors	English	<ul style="list-style-type: none"> • The Valley Fair • Potluck lunches • Crafts for kid's party 	Affluent

								<ul style="list-style-type: none"> • Two adult social parties • Winter carol exchange • Cookie exchange • Host mom's group dinner 	
Interview I	F	Caucasian	12	1	No	Masters	English	<ul style="list-style-type: none"> • The Valley Fair • Coordinate mom's/ ladies group dinner • Neighbourhood street representative • YMVA rate payers association member 	Affluent
Interview J	F	Caucasian	9	2	No	Masters	English	<ul style="list-style-type: none"> • Book Club • Soup exchange • Cookie exchange • Host mom's group dinner • Organize Halloween and Christmas parties • Secretary in the YMVA rate payer association group • Annual garbage clean up 	Affluent

Table 2: Demographic Information of Alexandra Park & Hogg's Hollow participants.

** Did not find any male participant who was interested to participate hence recruitment sample only consists of females.

Is there a connection between your neighborhood & mental health?

This research project is part of a MES Major Paper for York University's Faculty of Environmental Studies (FES). The study received ethical approval.

Parent residents of Hogg's
Hollow & Alexandra Park: **I
want to hear from you!**

Please consider participating in
this research study to help us
learn more about how people in
Toronto understand the link
between mental health and their
environment.



To be eligible, you must be:

- 18 years or older
- Be parenting at least one child under the age of 12.
- Be a resident of either Hogg's Hollow or Alexandra Park neighbourhood.
- Have lived in the neighbourhood for 4+ years.
- Involved and participates in community activities.

What is involved?

One in-person interview for approximately 1 hour.
Interviews are anonymous and confidential.

Compensation: \$5 gift card to a local coffee shop.

For more information or to participate, please contact Jennifer at
647-493-4397 or email: neighbourhood.health@gmail.com

Appendix D – Interview Questions

Interview Questions

1. How long have you been living in this neighbourhood?
2. Can you tell me about your neighbourhood? What do you like about it? What don't you like about it?
3. What kinds of neighbourhood activities are you involved in?
4. How would you describe the environment around here?
5. What are some differences between more affluent neighbourhoods and poor/working class neighbourhoods? Where on this continuum would you put yours? Why?
6. Do you think there is a relationship between your neighbourhood, the environment and mental health? Why or why not?
7. Does anyone in your life experience any mental health challenges (like stress or depression or anxiety)? Do you think where they live has any impact on their mental health?
8. What do you think could be done to improve mental health in your neighbourhood?

Appendix E – Informed Consent Form

Informed Consent Form

Study Name: Exploring the relationship between Neighbourhood Environment and Mental Health in Toronto

Researcher: Jennifer Mahboob, Master's in Environmental Studies (MES) Candidate 2018, York University, Faculty of Environmental Studies, Tel: (647) 637-1242 Email: jennifermahboob_9@hotmail.com

Purpose of the Research: I want to learn about how residents in Toronto neighborhoods understand the relationship between mental health and their living environment.

What You Will Be Asked to Do in the Research: I will be inviting you to talk to me for about an hour. Interviews will take place in person. I plan to record our conversations so that I can remember them later. If you agree to participate in the study, I will ask you questions about your neighborhood, mental health and ideas you have for improving your community.

Risks and Discomforts: We do not foresee any risks or discomfort from your participation in the research. You have the right to not answer any questions.

Benefits of the Research and Benefits to You: Some people like to share their thoughts and ideas. To thank you for participating, I will be offering you a \$5 gift card to a local coffee shop. Your contributions will help me better understand and write about these issues, and perhaps lead to further conversations about how we can better promote mental health through environmental change.

Voluntary Participation: Your participation in the study is completely voluntary and you may choose to stop participating at any time. Your decision not to volunteer will not influence the nature of your relationship with me or York University either now, or in the future.

Withdrawal from the Study: You can stop participating in the study at any time, for any reason, if you so decide. Your decision to stop participating, or to refuse to answer questions, will not affect your relationship with the researchers, York University, or any other group associated with this project. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Confidentiality: All the information obtained through this interview in this study will be kept confidential. Unless you choose otherwise, all information you supply during the research will be

held in confidence and unless you specifically indicate your consent, your name will not appear in any report or publication of the research. The interview will be recorded, and you will be asked to verbally answer the interview questions. The audio recordings will be kept for a minimum of six months and will be deleted after the study is over. Confidentiality will be provided to the fullest extent possible by law.

Do you give consent to be recorded?

☐ Yes ☐ No Signature Date
Participant

Do you give consent to waive your anonymity, if you indicate for your name to appear in any report or publication of the research?

☐ Yes ☐ No Signature Date
Participant

Questions About the Research? If you have questions about the research in general or about your role in the study, please feel free to contact my supervisor, Dr. Sarah Flicker, either by telephone at (416) 736-2100, extension 20728 or by e-mail (flicker@yorku.ca). This research has been reviewed and approved by the FES Research Committee, on behalf of York University, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Research Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Legal Rights and Signatures:

I, _____, consent to participate in Exploring the relationship between Neighbourhood Environment and Mental Health in Toronto conducted by Jennifer Mahboob (MES Candidate). I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature Date
Participant

Signature Date
Principal Investigator

Appendix F - Pictures from Alexandra Park and Hogg's Hollow neighbourhood

Alexandra Park



Hogg's Hollow



